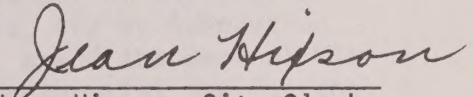


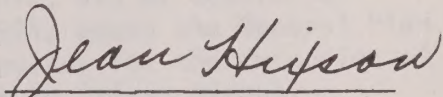
GENERAL PLAN AMENDMENTS

1. 1968 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 8172, adopted on February 10, 1969, amend the General Plan land use policy for the lands north of Central Expressway between Stevens Creek Freeway and North Whisman Road from Limited Industrial* to High Density Residential A*, 20 units per net acre.

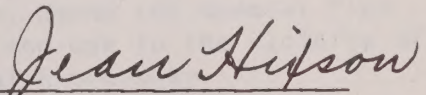

Jean Hixson, City Clerk
City of Mountain View

* See Amendment No. 4, 1972

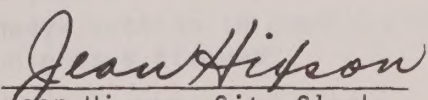
2. 1970 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 8658, adopted on April 27, 1970, adopt a Housing Element as an amendment to the General Plan.


Jean Hixson, City Clerk
City of Mountain View

3. 1972 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 9300, adopted on March 27, 1972, amend the Bikeways Section of the Circulation Element.

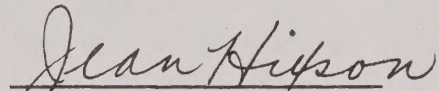

Jean Hixson, City Clerk
City of Mountain View

4. 1972 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 9346, Series 1972, amend the General Plan map and related portions of the General Plan text on the 22nd day of May, 1972.

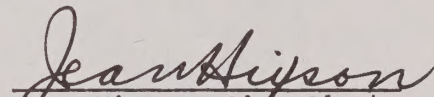

Jean Hixson, City Clerk
City of Mountain View

GENERAL PLAN AMENDMENTS

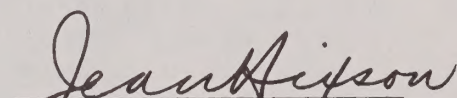
5. 1972 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 9475, adopted September 11, 1972, amend Chapter 4, A DESIGN FOR MOUNTAIN VIEW, North Bayshore Area, Urban Development and Map of the General Plan.


Jean Hixson, City Clerk
City of Mountain View

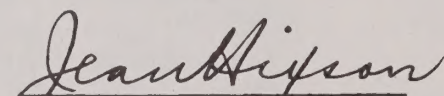
6. 1973 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 9618, adopted February 26, 1973, adopt the Open Space and Conservation Element as an amendment to the General Plan.


Jean Hixson, City Clerk
City of Mountain View

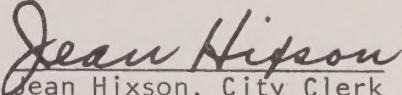
7. 1973 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 9630, adopted March 12, 1973, amend Chapter 3, GOALS, of the General Plan.


Jean Hixson, City Clerk
City of Mountain View

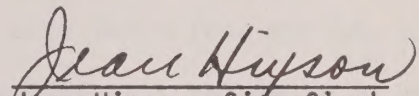
8. 1973 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 9631, adopted March 12, 1973, amend Chapter 6, Section 4, Fire Protection Element of the General Plan.


Jean Hixson, City Clerk
City of Mountain View

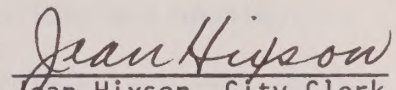
9. 1973 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 9734, adopted June 11, 1973, amend Chapter 6, Section 2, Parks and Recreation Section of the Public Facilities Element of the General Plan.


Jean Hixson, City Clerk
City of Mountain View

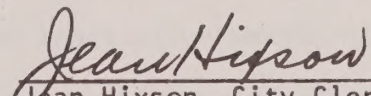
10. 1974 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 10110, adopted June 24, 1974, amend the General Plan Map pertaining to mixed density residential use for the area bounded by Junction Avenue, Thompson Avenue, Jane Lane and North Rengstorff Avenue.


Jean Hixson, City Clerk
City of Mountain View

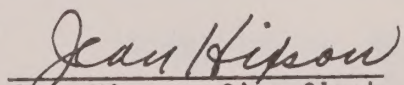
11. 1974 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 10177, adopted August 12, 1974, amend the General Plan Map and text pertaining to the policy for the extension of Dana Street from Moorpark Avenue to Sylvan Avenue.


Jean Hixson, City Clerk
City of Mountain View

12. 1974 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 10198, adopted August 26, 1974, amend the General Plan Map pertaining to the policy for land use in the vicinity of Ortega Avenue, south of the Central Expressway.

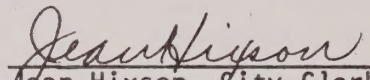

Jean Hixson, City Clerk
City of Mountain View

13. 1974 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 10213, adopted September 10, 1974, amend Chapter 7, the Circulation Element, of the General Plan by addition of a Street Design and Scenic Highways section in accord with State guidelines for a "Scenic Highways Element".

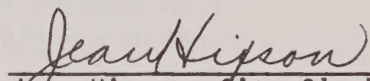

Jean Hixson, City Clerk
City of Mountain View

GENERAL PLAN AMENDMENTS

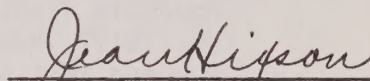
14. 1975 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 10364, adopted January 27, 1975, amend the General Plan map to change the land use designation of the Castro-Miramonte Triangle to office/commercial.


Jean Hixson, City Clerk
City of Mountain View

15. 1975 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 10391, adopted February 24, 1975, adopt the Sound Element as an amendment to the General Plan.


Jean Hixson, City Clerk
City of Mountain View

16. 1975 I hereby certify that the City Council of the City of Mountain View, State of California, did by Resolution No. 10392, adopted February 24, 1975, adopt the Safety Element as an amendment to the General Plan.


Jean Hixson, City Clerk
City of Mountain View

Chapter 5-A

HOUSING ELEMENT

INTRODUCTION

The kind of housing built in the City determines the kind of people who will live in the City. For example, a city containing primarily housing which appeals to transients will not attain a stable character. Once housing is built, it establishes and maintains the character of the city for a long period, since housing is long term in duration and is relatively difficult to change or modify. Thus, there is no more important element of the community than its housing and the plan for Mountain View should carefully guide the kind and mix of housing to effectively mold or shape the destiny of the community. Referring to the Community Goals set forth in Chapter 3, it is noted that Mountain View aspires to ensure a wide range of dwelling types and a balance between jobs and housing.

During the mid 1960's, housing and its related problems reached a new level of national pre-eminence and concern. At the national level, Congress enacted new legislation which provides additional housing programs for local implementation. Moreover, federal government regulation requires that general plans contain housing provisions as a prerequisite to certain grants. The State's involvement has been significant in its enactment of legislation which requires all local jurisdictions to include in their general plans, "housing elements" which make "adequate provision for the housing needs of all economic segments of the community".

The City of Mountain View is concerned with housing not only as a consequence of the directives described above, but because of local problems and local concern. As a participant in the Association of Bay Area Governments, the

City is a party to regional housing studies. The City of Mountain View has joined with Santa Clara County and the other 14 cities in the preparation of a joint Countywide Housing Element. The regional aspects of the housing market necessitate these cooperative approaches to ensure better understanding of local housing problems and to develop more meaningful programs. However, there are certain activities in which the City of Mountain View could engage immediately and in the immediate future, and this element of the General Plan is intended to establish the policies for such activities. As the broader sub-regional and regional studies are completed, this element should be modified to reflect their conclusions and policies as applicable.

This Housing Element sets forth goals and policies and suggests programs for implementation based upon local needs but is intended to be consistent with the Countywide and regional efforts.

BACKGROUND

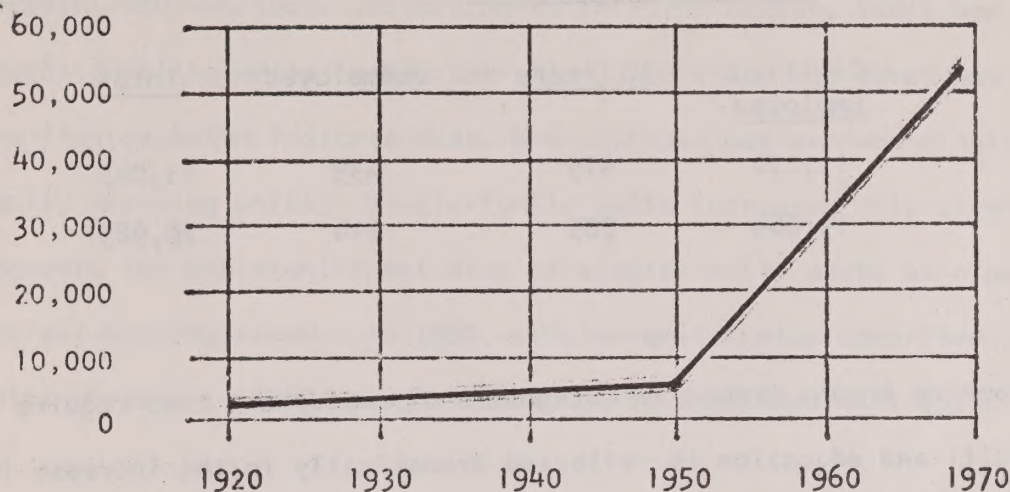
The housing situation in Mountain View has changed considerably during the past two decades. This change has resulted in large measure from the rapid urbanization that has taken place in the area. The location, cost, and types of housing available have been influenced by the quick growth in population and employment, greater affluence and a changing pattern of land uses.

Population

Mountain View has experienced a rapid growth in population especially over the last twenty years. From a town of 6,563 people in 1950, Mountain View grew to a City of 30,889 in 1960, an increase of over 24,000 or 370%. With the 1969 population estimated at 53,200, it appears that the population growth during the 1960's will match the growth of the 1950's.

FIGURE A

CITY OF MOUNTAIN VIEW POPULATION



Employment

Mountain View's growth in employment has been as dynamic as its population growth. Total employment, for example, increased from a few thousand in 1950 to over 24,000 in 1965. Agriculture is no longer a primary source of local employment. Instead, the largest category of employment is now in manufacturing where, in 1965, almost 13,300 people were employed. The decline in agricultural employment opportunities has seriously affected many low income families who lack the skills required by newer industries. Other employment categories have also increased markedly, especially those which are concerned with supplying goods and performing services required by the increased population.

FIGURE B

EMPLOYMENT BY INDUSTRY*

Planning Area - June, 1965

<u>Agri-</u> <u>cult.</u>	<u>Mfg.</u>	<u>Retail</u> <u>Trade</u>	<u>Whole-</u> <u>sale</u> <u>Trade</u>	<u>Service</u>	<u>Finance,</u> <u>Insurance,</u> <u>Real Est.</u>	<u>Transportation,</u> <u>Communications,</u> <u>Utilities</u>	<u>Gov't</u>	<u>Total</u>
350	13,800	3,700	600	3,800	500	500	1,900	24,300

* Source: Santa Clara County Planning Dept.

RESOLUTION NO. 8658
SERIES 1970

FIGURE C

SIZE OF RESIDENT LABOR FORCE

City of Mountain View

	<u>Civilian Employed</u>	<u>Military</u>	<u>Unemployed</u>	<u>Total</u>
1960**	12,127	479	439	13,045
1966*	19,664	705	614	20,983

Income

The Planning Area's growth in categories of employment that require high levels of skill and education is reflected dramatically in the increase in household incomes from 1959 to 1965. During this 6 year period when the number of households nearly doubled, households reporting incomes over \$15,000 more than tripled, increasing from 388 households in 1959 to 1,643 households in 1965. Those earning between \$8,000 and \$15,000 also increased markedly. However, it should be noted that in spite of growing community affluence, the number of households reporting incomes less than \$4,000 also increased substantially from 1,501 households in 1959 to 2,240 in 1965.

FIGURE D

HOUSEHOLD INCOME - MOUNTAIN VIEW PLANNING AREA

	<u>0 \$1000</u>	<u>\$1000 2000</u>	<u>\$2000 3000</u>	<u>\$3000 4000</u>	<u>\$4000 5000</u>	<u>\$5000 6000</u>	<u>\$6000 8000</u>	<u>\$ 8,000 10,000</u>	<u>\$10,000 15,000</u>	<u>\$15,000 over</u>	<u>TOTAL</u>
1959 **	175	351	436	539	677	844	2129	1792	1942	388	9,293
1965*	240	544	702	1054	1238	1724	3101	3165	4280	1643	17,691

Source: * Santa Clara County Planning Department
** 1960 U. S. Census

Housing

The total number of dwelling units in the City more than doubled between 1960 and 1969. According to the 1960 Census, there was a total of 10,281 dwelling units in Mountain View. By 1969, the total was 21,388 units. The figures below indicate that this increase was overwhelmingly in multiple-family dwelling units. Single-family units increased only slightly which accounts for the significant drop of single-family units as a percentage of the overall housing stock. In 1960, single-family units comprised 72% of the total units whereas in 1969, single-family units comprised only 35% of the total.

FIGURE E

HOUSING UNITS BY TYPE OF STRUCTURE

City of Mountain View

<u>Year</u>	<u>Total Housing Units</u>	<u>Number of Housing Units in Structure</u>						(5 or more)
		<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5-9</u>	<u>10 or more</u>		
1960**	10,281	7416	507	475	644	1239	(1883)	

<u>Year</u>	<u>Total Housing Units</u>	<u>Number of Housing Units in Structure</u>						50 or more	(5 or more)
		<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5-10</u>	<u>11-19</u>	<u>20-49</u>		
1969**	21,388	7694	1628	1444	2345	1689	2564	3988	(10,586)

Source: * 1960 U.S. Census of Housing
** 1966 Special County Census updated with City of Mountain View
building permit data

LOCAL HOUSING PROBLEMS

Mountain View's housing problems are basically (1) an insufficient supply of adequate housing at prices suitable for low and middle income families; and (2) a limited range in the choice of dwelling types available to families of all income levels. This situation has resulted from the interaction of many socio-economic factors.

The sharp increase in housing costs is one important factor. Virtually all of the single-family homes constructed since 1965 have been in the over \$30,000 category with most of the more recent construction in the Grant Road area costing \$45,000 to \$50,000. Higher costs, however, are not limited to newer homes. Many of the older homes such as those in the Rex Manor area which originally sold for around \$6,000 are now around \$18,000-\$20,000 -- out of the reach of most low income families.

Rents have also increased sharply. According to the 1960 Census, the average rent in Mountain View was \$96 per month. The results of a survey conducted in 1969 are shown in Figure F, indicating that the lowest typical apartment rent is considerably higher than the average of all rents in 1960.

FIGURE F

MONTHLY RENTAL OF APARTMENTS

With 5 or more Units - April 1969

City of Mountain View

<u>No. of Bedrooms</u>	<u>Rental Range of Furnished Units</u>
Studio	\$125 - \$170
1 Bedroom	\$130 - \$225
2 Bedrooms	\$150 - \$245
3 or more Bedrooms	\$220 - \$340

Source: Joint Survey by School of Business of San Jose State College and the Santa Clara County Planning Department

Because sound housing is beyond their financial capabilities, many of the low income families have chosen to live in transition areas where houses are generally older, often substandard, but the rents tolerable. These transition areas, as identified in a recent survey of housing condition, are in the central area, North Bayshore area, Rengstorff-Plymouth area, Washington-Jackson area and University Park.

FIGURE G

NUMBER OF SUBSTANDARD DWELLING UNITS

By Dwelling Types - 1969

<u>Statistical Area</u>	<u>Single Family Units</u>	<u>Duplex Units</u>	<u>3 and 4 Family Units</u>	<u>Total</u>
A. North Bayshore	79	11	3	93
B. Rengstorff	41	20	7	68
C. Thompson	1	-	-	1
D. Stierlin	50	14	18	82
E. Whisman	20	6	11	37
F. San Antonio	25	12	4	41
G. Central	120	56	46	222
H. Sylvan-Dale	7	-	-	7
J. Grant	9	-	-	9
K. Miramonte	7	-	-	7
Total	360	119	89	568

Source: Windshield Survey of Housing - City of Mountain View

While transition areas represent the largest single source of low income housing, it is a source that is rapidly diminishing. New industrial buildings, for example, are replacing homes in the Rengstorff-Plymouth area. When such redevelopment occurs, displaced families are faced with the problem of either relocating to another community or remaining in Mountain View at the expense of paying a more disproportionate share of the household income for housing.

Another problem arises from the fact that there is a limited choice of dwelling types available to larger families, regardless of income. Single-family homes have traditionally been the source of housing for families with children. However, as indicated in Figure E above, recent housing construction has definitely tended towards multiple-family units, most of which are not designed for large family living. For this reason, even families that can afford to live in Mountain View are forced to locate in other communities.

Displacement of families as a result of public works projects weighs more heavily on the lower income families and on the elderly who must then go into the competitive housing market. Low income families and the elderly may have established an adequate housing situation, having purchased their homes in earlier times when prices were tolerable. Proceeds from public acquisition, though at fair market value, often do not permit replacement in kind.

Although the underlying cause of the local housing problem is primarily economic, there is a strong relationship between income levels and the ethnic composition of the community. Mexican-Americans are the largest minority group in Mountain View. The 1966 Countywide Census figures indicate that most of the Mexican-American households had lower incomes and lived in the transitional areas identified above.

FIGURE H

POPULATION BY NATIONAL ORIGIN AND RACE

Mountain View Planning Area

	<u>Mexican-American</u>	<u>Negro</u>	<u>White</u>	<u>Other</u>	<u>Total</u>
1960*	4179	46	33,830	1553	35,429
1966**	3035	358	47,845	2373	50,576

Source: * 1960 U.S.Census
 ** 1966 Countywide Census

RESOLUTION NO. 8658

SERIES 1970

There is also a relationship between income levels and the age composition of the community. Moreover, the number of older persons is increasing. Incomes for the aging tend to be fixed. The expectations, therefore, are that older people will be less able to compete for housing in Mountain View.

FIGURE 1

TOTAL POPULATION BY AGE
CITY OF MOUNTAIN VIEW

<u>Age Categories</u>	<u>1960*</u>	<u>1966**</u>
0- 4 years	4016	5723
5- 9	3447	4375
10-14	2770	3684
15-19	1875	3540
20-24	2364	6050
25-29	2565	5094
30-34	2652	3328
35-39	2736	2892
40-44	2112	3205
45-49	1631	2786
50-54	1236	2351
55-59	946	1582
60-64	748	1163
65-69	628	949
70-74	517	747
75-79	341	528
80-84	189	317
85 +	116	189
Total	30,889	48,503

1791

2730

Source: * 1960 U.S. Census
** 1966 Santa Clara County Census

RESOLUTION NO. 8658
SERIES 1970

In conclusion, the housing problem is characterized by (1) rising prices; and (2) lack of choice. These affect everyone but hit hardest the newcomers (those who enter the housing market last who must discharge the increasing costs of land and construction), the poor and the elderly. There is serious lack of choice for large families, for minority groups and for the elderly.

The implications of this situation are, or should be, of concern to everyone in the community. The housing problem tends to force lower income families to live elsewhere, even when they work in Mountain View, with the result that the transportation problems affect everyone through congestion, smog and the loss of these human resources from the community.

Another implication of this situation is that the community does not accommodate changing family composition with the result that as a family changes, its members are likely to move away--rather than remain as long standing contributing members of the community.

Another implication concerns the elderly. As old persons leave, they suffer problems of re-adjustment. The community suffers from the loss of their knowledge and judgment in participation in community affairs.

In short, housing limitations become limitations on the character of the community itself. As housing becomes more expensive and choice more limited, the City can expect to become a homogenous community of middle income, middle age, transient citizens.

HOUSING GOALS

Mountain View's principal goals (Chapter 3) related to housing are:

- (1) to provide for a varied community by offering a wide range of dwelling types and facilities to attract and interest a population varied in income, age, family composition, occupation and interests; and (2) to assure that every person who

works in Mountain View has the opportunity to live in Mountain View and vice versa.

Housing sub goals stem from these. They are:

1. To ensure the provision of decent housing for all residents of the City of Mountain View, regardless of age, income, race or ethnic background.
2. To ensure a variety of individual choice of tenure, housing type and location in Mountain View.
3. To establish, maintain and enhance the character, quality and livability of residential areas.
4. To stimulate the provision of a quantity of new house construction commensurate with population growth needs.
5. To eliminate deficient housing and prevent future blight through conservation and rehabilitation of existing structures, and through replacement with new structures as necessary.
6. To continue the City's participation in regional and County-wide housing efforts, especially relative to better the functioning of the housing market, and the ability of the disadvantaged to function effectively within that market.

Within the context of the existing housing situation, it appears that many of the above goals are not readily attainable. It should be understood, however, that these goals represent the long range hopes and aspirations of the community which can be attained through the establishment of consistent short range policies and programs. Every effort should be made to ensure that expedient, remedial measures will not preclude or be inimical to the attainment of these goals.

HOUSING NEEDS

There is need to quantify Mountain View's low income and elderly housing requirements. This is difficult because of the pattern of work-residence mobility in the metropolitan area. Nevertheless, this will have to be done eventually to set forth this community's fair share of the responsibility for the regional problem. This allocation should be the product of the discussions of the various political jurisdictions within the region. The County-wide housing study and the ABAG regional housing study are expected to establish frameworks for such discussions.

In the meantime, Mountain View has immediate low income and elderly housing problems and potentials. The rate at which such housing can be provided is slow and there is little chance that the community will exceed its fair share in the immediate future. However, Mountain View should work to ensure that the regional and County-wide allocations of responsibility are discussed and agreed to with deliberate speed.

There is also a need for providing a variety of housing types. New approaches to housing design at all density levels in all neighborhoods are required to maximize opportunities of home ownership and housing for families with children, the elderly, and for disadvantaged minorities.

There is need to improve and enhance housing quality. This pertains to the quality of the neighborhood as well as the housing structure itself.

There need be nothing inconsistent in satisfying the three basic needs described above. Providing for housing for the low income and elderly in a neighborhood with a variety of housing types can actually enhance the quality of housing and the quality of life in the neighborhood. This presumes construction of all housing with careful attention to its design and permanent character.

While the definition of the City's share of low income and elderly housing may have to await the completion of other processes, meeting the needs as to variety and quality can proceed now. These should proceed now so that the community we build will continuously provide accommodations for a variety of people who will supply stability and variety as set forth in Chapter 3 on Community Goals.

RECOMMENDED POLICIES AND PROGRAMS

A comprehensive set of City policies and programs is required to deal with the housing problems, goals and specific needs described above. This approach necessitates the appropriate application of existing federal and state programs as well as the development and implementation of innovative local programs. The following are recommended courses of action for the City of Mountain View.

A. Federal Programs

1. Sections 235 and 236 of the 1968 Housing Act

The 1968 Housing Act has produced two new programs, Sections 235 and 236, which are appropriate for local application. Through these programs, the Federal Government is able to provide long-term, low interest loans directly to low income homeowners (Section 235) and subsidies to renters (Section 236). Land costs in this area are so high that these federal programs have limited application because there are ceilings on the total investment in a dwelling unit and ceilings are also imposed on rents and mortgage payments. The City's role should be that of making the private sector aware of the programs' existence, seeking qualified sponsors for 236 housing, and providing assistance in such matters as site selection, filing of applications, and working with federal officials for a better application of these programs to our problems.

2. Santa Clara County Housing Authority Program

Another federally sponsored program similar to Section 236 is the local housing authority program set up and federally funded under Section 23 of the 1937 Housing Act, as amended. This program provides for Housing Authority rental of existing housing units on the market and subleasing these to qualifying families at less than the prevailing rents. The City of Mountain View is participating in Section 23 programs through the Santa Clara County Housing Authority. This program is also of limited usefulness in Mountain View because of the limited supply of housing which can qualify under rent ceilings imposed on the Housing Authority. The City should continue and expand its support of the Authority's programs.

3. Other Federal Programs

There are other existing Federal programs which may provide assistance consistent with the City's goals. These programs and new ones, as they are enacted, should be evaluated and the desirable ones implemented. The use of programs should not be limited to those directly related to housing. Other programs, such as those that deal with public works projects, can provide indirect financial assistance by freeing more of the City's monies for direct housing programs.

B. State, Regional and County Programs

The State of California, the Association of Bay Area Governments (ABAG) and the cities and County within Santa Clara County have conducted housing studies. The City of Mountain View should continue its cooperation in the conduct of these continuing efforts to ensure that resulting programs will be useful to and have the full support of the City of Mountain View.

C. Local Programs

1. Relocation of Families Displaced by Public Improvements

The construction of public improvements such as street widening projects often result in the displacement of low income families. Because of the extreme shortage of low income housing, displaced families, in the past, have had difficulty in finding satisfactory replacement housing. To minimize relocation problems, the following two programs are recommended.

- a. In cases where low income homeowners are being displaced, the City should offer exchanging like or equivalent dwellings in lieu of cash transactions.
- b. In other cases where renters are being displaced, the City should offer a program of home ownership to low income families by making available direct, long term, low interest loans. The source of loan funds can be either included as part of the bond issue for specific improvement projects or a separate measure with funds earmarked specifically for long term loans to families displaced by public improvements. To minimize costs, primary consideration for long term City loans should be given to displaced low income families who agree to purchase homes acquired by the City as a consequence of public improvements. This program has the advantages of providing home ownership opportunities to low income families and allowing rapid disposition of excess City owned properties.
- c. Another alternative for assisting renters displaced by public works projects is to supplement the federal housing subsidy program (Section 235 or 236) by means of a special contribution,

sufficient to make a federally subsidized project feasible that would not otherwise be feasible due to high land or construction costs characteristic of this community. This would constitute a "cost" to the public works project. For example, a proposed federally subsidized housing development may fail to qualify financially because the land cost per unit is excessive. A City contribution of perhaps \$1,000 per unit might bring the development to feasibility. Such a contribution could be budgeted into the cost of the public works project.

D. Land Bank Program

The City should undertake a program of acquiring parcels of land throughout the City and holding them until conditions warrant their development as sites for housing of low and middle income families displaced by public improvements. When the need arises for relocating these families, sites can be sold at cost to sponsors of federally subsidized or other low and middle income housing. While this program has the disadvantages of temporarily taking properties off of the tax rolls and requiring a large initial investment by the City, it does provide the definite opportunity of reserving sites for low and middle income housing, distributing low and middle income housing throughout the City, and perhaps hedging against inflation.

E. Relocation of Families Displaced by Private Development

The private sector must play an important part in providing solutions to the local housing problem. Large areas of the City which currently provide housing for low income families will, in the future, redevelop to other uses. There is a need for a program which would require

developers of properties to provide low income housing equivalent to the total number of housing units removed. Local legislation should be considered which would require that developers of apartments assign to the County Housing Authority, housing units equal to the number of families being displaced by the project.

Where industrial or commercial developments remove housing, local requirements should provide for contributions from the developer to a "Housing Fund" used to supplement subsidized programs as set forth in C.c., above.

Both of the above programs can be tied to the housing demolition process. In effect, this would constitute a tax on demolitions.

F. Incentive Program for Providing Family Living Rentals

As previously mentioned, one of the housing problems has been the lack of rental units for larger families. A partial solution to this problem can be provided by amending portions of the Zoning Ordinance to allow builders of rental developments to increase the number of units (density) in High Density A areas (see page 68) when family rental units are constructed as part of the project. Builders, for example, could be allowed to increase the density of their development by 10% if the additional 10% is to be in units expressly designed for larger family living.

G. Establishment of New Residential Zones

Consideration should be given to the establishment of a new multiple-family residential zone which would permit only condominiums and

cooperative apartments as principal permitted uses. The purpose of this is to provide additional opportunities for home ownership.

H. Program to Encourage Innovation in the Design of Residential Construction

Developers and builders of residential structures should be encouraged to seek innovative techniques in residential design and apply new methods in construction that are consistent with the goals set forth above. They should be made aware of the City's willingness to modify any existing codes and ordinances and to establish any new regulations necessary to facilitate the implementation of desirable innovations.

I. North Bayshore Area

The North Bayshore Area presents a special opportunity for providing a variety of dwelling types for families of all income levels. Present plans for the area envision complete redevelopment--the removal of existing homes, recontouring of the land and a planned development of mixed uses. Because the existing homes in the North Bayshore Area now constitute a significant percentage of low income housing, the developers of this area should be required to provide, as a part of their project, low income housing units in the amount at least equal to the current number of existing homes.

The programs and policies above will require careful development to become operational. If State constitutional barriers arise, a local election may be necessary to authorize and implement some of these programs and policies.

Other programs and policies will appear on the horizon as needs emerge and as other federal, state and regional enabling actions occur. The City should maintain an "open door" policy directed toward continually examining housing needs and opportunities.

AMENDMENT NO. 3, GENERAL PLAN TEXT REVISION

(Resolution No. 9300, adopted March 27, 1972. The text following replaces the text of the Bikeways Section of the Circulation Element, pages 156-158. Figure 23, Bikeways Map, was also amended by the same resolution.)

A system of bikeways must be designed and constructed to provide for the use of bicycles for trips to school, work, shopping, and for recreation. The bicyclist must share the facilities and responsibilities of the motorist and the pedestrian; at times he must assume the role of a pedestrian and at other times a motorist. The design of bikeways should take this fact into account. The bikeways must tie the community to surrounding cities and provide internal circulation. The following definitions will apply to the bikeways system in Mountain View:

Bikeways: A general and inclusive term describing all marked and unmarked areas suitable for bicyclists including specifically designated paths, routes, or lanes and unmarked areas such as residential streets.

Bike Route: A designated street, sidewalk, or path or combination of same, approved by proper authority and identified by "Bike Route" signs. On a "bike route" bicycles are expected to comply with the Vehicle Code or Municipal Ordinance.

Bike Lane: A portion of a bikeway marked and signed for exclusive use of bicycles on the surfaced roadway of a public street.

Bike Path: A graded and surfaced bikeway separated from the surfaced roadway for exclusive use of bicycles.

Figure 23, the Bikeways Map, is a general plan designating arterial and collector streets on which route and lane improvements must be made, if not now existing, to allow for the safe accommodation of bicyclists. The map also shows bike paths. This is not necessarily a map of preferred bikeways, as bicyclists are free to use any streets in the city; rather, it is the base for a continuous bikeway system.

For the most part continuous specially designed bikeways shall be located along arterials and collector streets. In these cases, special roadway design will be required in order to delineate the lines of responsibility for motorists, bicyclists, and pedestrians. It is essential that the major streets be designed for bicycle use since these streets provide the most direct routes between points of interest within the community, and are most often used by the bicyclist; yet as now delineated offer minimal protection to him. In addition, only the major arterials are provided with signalization which offers needed protection for crossing other major arterials.

Since most of the existing street network in the community is fully improved, it is essential that design compromises be made between facilities for motorists, pedestrians, and the bicyclist. Lanes, striping, directional signs, and sometimes barriers will need to be provided. In some cases, it may be necessary to reduce lane widths or eliminate on-street parking. In other cases, it may be necessary to share sidewalk space with pedestrians for short stretches. Sufficient sidewalk width should be provided to ensure the safety of pedestrians and bicyclists. Curbs should be ramped and other modifications made for easy access to such sidewalk areas.

When new streets are designed and improved, specific attention should be given to right-of-way widths particularly of those streets noted in Figure 23 to ensure that sufficient width is provided for bicycling.

Provision shall be made for bikeways on all existing and new pedestrian overcrossings constructed at expressways and major arterials. The bikeway locations indicated in the plan (Figure 23) shall be general and specific route locations may be modified as dictated by the availability of right-of-way, funding and other considerations.

The following are the policies for bikeways within Mountain View:

1. Bicycles and bikeways shall be considered an important part of the city transportation system.
2. The bikeways route system shall be a continuous network within the community and shall be tied to existing or planned networks in adjoining cities.
3. The role of the bicyclist on the city street system is sometimes that of pedestrian and sometimes that of motorist. Bikeways must be designed with this in mind. An education program should be developed and implemented, that fosters cooperative and safe use of common right-of-way among pedestrians, bicyclists and motorists.
4. Bike lanes will be provided on arterials and collectors designated on Figure 23.
5. In order to construct a continuous bikeway system, it may be necessary to reallocate some of the right-of-way space assigned to the motorist and the pedestrian to the bicyclist. This may result in modification in the automobile lane widths, elimination of parking and bicycle utilization of some of the sidewalk area.
6. It is recognized that bikeways represent an additional level of responsibility to the motorist, pedestrian, and bicyclist. Bikeways, particularly bike lanes on roadways, will not guarantee safety, but merely enhance safety and clarify responsibility.

7. Facilities for bicycle storage shall be provided in conjunction with community buildings, places of private commerce, and at residential accommodations. Location and design principles for these facilities shall include protection from theft and accident.
8. Traffic signals and pedestrian-actuated signal controls should be designed or redesigned with bike use and bicycle activities in mind.
9. Bikeway locations need not be limited to streets. Exclusive paths should be provided through neighborhoods, using wherever possible existing corridors such as Stevens Creek, Permanente Creek, levees, the Hetch-Hetchy right-of-way, and other utility easements.
10. A system of ordinances covering utilization of bikeways shall be established.
11. A schedule and priority for implementation of the bikeways shall be set up and followed.
12. All neighborhood plans, derivative plans and other specific plans shall take bicycle needs into account.
13. Specific attention shall be given to the design of street intersections to ensure that these complex points are safer for and more easily traversed by the bicyclist.
14. In the construction of bikeways, preference shall be given to making improvements on those streets shown in the Bikeways Plan which will be utilized by students travelling by bicycle to and from school.
15. Public Works Department street standards shall be modified to show alternative ways of accommodating bicyclists within the right-of-way shown in typical street cross sections.

figure 23 | bikeways map



legend:

Bikeways Along Streets

Separate Bicycle Paths

Connections with Inter-city Bikeways

AMENDMENT NO. 4, GENERAL PLAN TEXT CHANGES

(Resolution No. 9346, adopted May 22, 1972. The text changes below refer to the General Plan of the City of Mountain View. The General Plan Map was also amended by the same resolution.)

1. The 1968 amendment certification at the beginning of the General Plan refers to a change in policy from limited industrial to high density residential, 20 units per acre, for a specific area. Reference should be made to the amended General Plan map which sets the policy in this area to mixed density residential.
2. Under the "List of Illustrations", the last sentence refers to a 1985 projected land use map and fold-out proposed General Plan map located just inside the back cover. That sentence should be deleted and replaced with the following: "The proposed General Plan map is located just inside the back cover."
3. On Page 3, second paragraph, under The Plan, a sentence should be added stating "Precise area plans shall provide short-range policies for transition."
4. On Page 3, third paragraph, under The Plan, the last sentence referring to the 1985 plan should be deleted.
5. On Page 65, paragraph two should be changed to read: "The table below indicates 6 different classifications of residential densities together with a projected full development acreage and the number of dwelling units per each. In order to contrast these figures, the number of existing dwelling units is also indicated. A fold-out General Plan map just inside the cover, indicates the proposed residential areas within the city."
6. On Page 65, in the last paragraph the sentence, "These areas are shown on the General Plan Map" should be deleted.
7. On Page 68, beginning with the first full paragraph, the third sentence should be deleted and the fourth sentence should be modified to read: "These projections are based on population pressures, limited land availability, etc."
8. On Page 70, second paragraph, the first sentence, "Areas for twenty, thirty, and forty families per acre indicated on the General Plan Map" should be deleted and the wording of the second sentence should be changed to read, "The variety of densities is consistent with longstanding community standards contained in the Zoning Ordinance." The last sentence in the paragraph shall be retained but a fourth provision added: "and a rational plan of transition is adopted."
9. On Page 70, third paragraph, the sentence should be changed to read: "The Plan generally provides for higher densities as transportation and commercial centers of the city are approached."

10. On Page 72, the last paragraph in Section 1, the last sentence, "The fold-out General Plan Map, inside the back cover, indicates the location of the various densities" should be deleted.
11. Figure 26, 1985 Projected Land Use Map, should be deleted. It will be the purpose of specific area or neighborhood plans to define many of the steps on the way to full development.
12. On Page 61, Introduction, change the second paragraph to read:

"The land use element of the General Plan designates the general locations, the amount, and the extent of residential, commercial, and industrial land use. A fourth major category of land use, open space, is covered in other sections of the Plan. These uses are arranged and coordinated to create a desirable environment for people. The General Plan map designates the allocation of these broad categories of use throughout the city. Chapter 4 of this Plan, A Design for Mountain View, and Precise Plans address themselves to more specific distinctions of the intensities of the use and their allocation in time."
13. On Page 65, the following should be added to the second paragraph:

"Precise Plans shall further allocate the following residential density classifications."
14. On Page 75, the first paragraph should be changed to read:

"Within the commercial classification there are five levels of intensity designed to fulfill the requirements above. These levels shall be further specified in the remainder of this section and in precise area plans."

Policies for Administration of the General Plan Map, to be added to the Implementation Section beginning on page 166.

1. The primary basis for consideration of changes in land use (zoning) shall be precise plans (or derivative plans) of designated areas of the community. The precise area plans shall have been adopted or ratified subsequent to the revisions of the General Plan Map, May 22, 1972. Such precise area plans shall provide specific guidelines for future land use and for the manner in which transition from one use to another will take place. The area plans shall be "short range" and "mid range" in nature. They shall follow for the most part the land use policies within the body of the General Plan, but because of their increased focus shall be more specific with respect to timing, nature of land uses, and community design. In the development, review and adoption of specific area plans, it may be necessary to consider further modifications and amendments to the General Plan. While not a direct part of the General Plan, these area plans shall be considered derivative from the Plan and a phase in the implementation process.

2. In the absence of a precise area plan, land use changes (zoning) shall be made with caution, particularly where they tend to intensify land utilization.
3. In the absence of a precise area plan, land use changes must ensure a timely logical transition in relationship to market conditions, needed services, and facilities and the effect upon existing uses in the area.
4. Land use considerations in residential areas shall strive to provide a variety of zoning densities commensurate with the Low Density Residential and Mixed Density Residential designations. Within the Low Density areas, a range of R1 zones shall generally be considered unless designated in a precise plan. Within the Mixed Density Residential area, the zoning may include the R1 zone and may range to high density residential zones.
5. In the absence of a precise area plan, land use changes (zoning) may be considered where these changes will improve the living environment and provide greater flexibility for future development of precise plans.

CHAPTER 4 - A DESIGN FOR MOUNTAIN VIEW, North Bayshore Area, Urban Development

(Resolution No. 9475, adopted August 28, 1972. The text following replaces previous policy for the North Bayshore Area, Urban Development, pages 44-49. Figure 9, North Bayshore Generalized Land Use, replaces the former Figure 9, North Bayshore Area Fill Plan. The General Plan Map was amended in accord with the resolution.)

Urban Development

The General Plan indicates urban development in the area south of the salt ponds. This area is divided into two parts: (1) Stevens Creek West covering the lands westerly of Stevens Creek; and, (2) Stevens Creek East covering the lands easterly of Stevens Creek, and held in large part, by the United States Government and devoted to national facilities.

Stevens Creek West

This area is bounded by San Antonio Road, Bayshore Freeway (Highway 101), Stevens Creek and the salt ponds. Nearly 40% of this area is in public ownership and devoted to the City's Shoreline Park. The remaining area consists of approximately 850 acres lying between the park and Highway 101 (Bayshore Freeway).

Physical Constraints. The principal physical constraints which influence this area have been well documented. The following, not listed in order of magnitude or importance, are some of the major factors. Noise is a principal problem emanating from the freeway, Moffett Field aircraft and the NASA installations (wind tunnels) across Stevens Creek. The freeway noise is continuous and at levels which are clearly detrimental to some urban uses. Much of the area is subject to flooding, being maintained free from inundation by the salt pond dikes, the park and the dikes built along both Permanente and Stevens Creeks. This is particularly true given a combination of high tide, storm, and rupture of the salt pond or creek dikes. Moreover, the area is subject to subsidence, having experienced 31 inches of subsidence over the last 11 years. Such subsidence aggravates the flood hazard for the area. Water supply for this area is obtained mainly from pumping wells which tap underground aquifers. Control of the water table is necessary to avoid subsidence. Local drainage is also a problem since dikes protecting against Bay waters trap local water and there is no comprehensive drainage system.

The geology of the area presents earthquake risks for structures. Lands along the creeks are subject to shallow liquefaction and lands in the southeast corner of the area are subject to deep liquefaction. Lands filled to compensate for subsidence and flooding may increase the earthquake hazard to buildings.

The area is isolated and has limited access, being adjacent to the bay on the north, Charleston Slough on the west, Stevens Creek and the United States Government facilities on the east and Bayshore Freeway on the south. These, and particularly the freeway, isolate the area. Access to this area is afforded from or over interchanges in the Bayshore Freeway. This limited access further isolates the area from the rest of Mountain View.

Physical constraints also include the persistent winds from the bay having unimpaired movement over these flat lands along the shore. While these

winds are beneficial to the rest of the valley in maintaining cool temperatures in the summer, they can constitute a discomfort to people in the area.

Air quality during windless periods is a constraint in the area close to Bayshore Freeway. Uses for this area should not add to the existing air pollution.

The lands are marginally suited for agriculture, and some lands are so poorly suited that agricultural income does not meet expenses. Solid waste fill operations in the area, occasioned by the City's arrangements with the City of San Francisco and by its own solid waste disposal operations, present a less than attractive environment for many uses. While the San Francisco solid waste disposal operations will be of limited duration, the local operation will continue indefinitely.

Visually the area is characterized by overhead utilities and man-made creek dikes and the area is sparsely developed with marginal mixed uses. The ownership pattern is diverse, there being a number of very large holdings as well as a number of very small holdings. The limited availability of utilities, such as sewer and water, is a constraint. Roads are inadequate for intensive uses and movement within the area is difficult.

Economic Constraints. Economic constraints in the area are characterized by the great cost to the public of capital improvements that would be required should the area be used for intensive urban uses. (These include the costs of improving existing roads or developing new ones and constructing new utilities and public facilities.) Even buildings housing public facilities, such as schools, would be more expensive because of environmental factors and the need to take special and expensive precautions dealing with these. All such public costs are critical because improvements are difficult to provide on a piecemeal basis and require entire systems within the corresponding investment.

The economics of land development involve great costs for fill where urban development is contemplated. Such costs may be warranted only for intensive uses, in turn inconsistent with other constraints.

Social constraints. Social constraints in planning the area concern the 570 households and their resident population. Housing falls into two categories: some 350 units located within the mobile home park adjacent to Stevens Creek; and 220 conventional housing units occupying the area primarily west of Stierlin Road. The area is characterized by employment, health, education and income problems.

Basic criteria to be used in developing policy for the North Bayshore Area are derived by the constraints above and the city's goals set forth in Chapter 3 of the Plan. These criteria are:

1. Development shall respect the physical, economic and social constraints of this area.
2. The use of the area shall have a benign impact upon the basic natural environment in the shoreline area north of the Park.
3. The area shall be designed to be an integral part of and complementary to the rest of the City of Mountain View.

4. Uses shall be complementary to, and create the proper environment for the city's Shoreline Park.
5. Plans and implementation shall insure quality development but such development shall not be a burden on the rest of the community.
6. Planning and implementing changes in the area shall result in improvement to the physical environment of the residents of the area. The social impact of any development shall be considered.
7. Life and property shall not be put in jeopardy through development which does not properly take into consideration the flood prone and geological hazards of the area.

The Plan. The plan for this area which is portrayed in general terms in the accompanying General Plan Map is termed an "Industrial-Open Space Plan". It is basically a low intensity use plan intended to permit maximum private use of the land consistent with the constraints and criteria set forth above and consistent with the public interest. It is intended that the "feeling" of the Shoreline Park be extended to encompass the entire area, giving the feeling that all uses are in a park atmosphere. It provides that the land be devoted to industrial and open space uses consistent with the characteristics of the land, the needs of the community, and the needs of the Shoreline Park; and it provides for the eventual phasing out of the residential uses because of noise, flooding hazards, potential congestion, and the great public costs which would be required to create a suitable residential environment.

Industrial. The Plan provides for an industrial strip and corporate offices along the freeway from San Antonio Road to Stevens Creek. This urban area would occupy the high lands extending northerly approximately to the 10 foot contour. This strip is heavily impacted by the freeway as to noise, air pollution, and traffic. Industrial uses and office buildings are best capable of dealing with these by the use of air conditioning systems and substantial construction. Some 370 acres are set aside for this purpose to be phased into use over a 20 or 30 year period. In order to minimize traffic problems which could be generated by workers traveling to and from the area, some of the area should be set aside for industrial development which would require a low proportion of employment to acreage. The industrial lands lying alongside of the Shoreline Park, on the other hand, should be of a limited industrial character and tending more toward corporate office uses. The park will provide an exceptional environment for such uses and the proximity of the golf course and other recreational facilities of the park make it a particularly attractive location for such uses. In order to limit these preferred lands to the highest quality developments, special requirements for open space and landscaping shall be provided on such building sites in order that the buildings may seem to be placed in the park itself, thereby adding to the amenity of the total area.

Commercial. A hotel-motel area is indicated in the plan in the northeast quadrant of the Rengstorff-Bayshore interchange. This location, adjacent to the park, is intended to serve a diverse group of patrons seeking temporary lodging in the area. Such a hotel-motel complex could serve visitors to the park who may wish to participate in the golfing and other recreation

activities planned for that facility. Hotels could also accommodate transients moving along Bayshore Freeway in this area attracted by the special environment created by the Park and the North Bayshore area. In addition, the hotel-motel area which could also accommodate restaurants and other service facilities for the industrial area abutting, could serve as a major commercial gathering place for groups from the larger Mountain View community, thus helping to tie the entire area to the community of Mountain View. Criteria for the development of the 35 acres of land set aside in this location must insure the highest quality, consistent with the multi-million dollar public investment in the Park in this area. No roadside motel is sought here. Projects should be characterized by open spaces consistent with the open space concept of the park and substantial structures capable of dealing with the noise and congestion of the freeway for inhabitants so as to create a first class accomodation in every respect.

Open Space - Recreation. Northerly of the east-west arterial road (Charleston) and running more or less along the 10 foot contour is a 300 acre area indicated for open space uses. This includes the land running from the arterial road to the Shoreline Park. It is intended that this low lying land remain permanently in uses that are essentially open in character such as agriculture and commercial recreation even though the lands may be filled. The chief characteristics of the latter, however, must be that the uses would be low intensity in nature and complementary to the Shoreline Regional Park. The criteria for these open space uses is set forth below. Under special consideration, cultural facilities involving open space, and possibly some buildings, could be included in the area. Open space meets the development criteria set forth above for example, in being complementary to the Shoreline Park, a benign influence on the bay and its environs, and respecting the physical constraints in the area. The uses permitted under this policy would respect private property rights by allowing private uses, albeit limited and consistent with the environmental condition in the area and the general welfare. Such uses could be set forth in a special zone and could include agriculture, green houses, equestrian facilities, both public and private, limited intensity amusement facilities, etc.

The criteria for commercial recreation and cultural facilities for the open space lands are as follows:

1. Uses should be such that lands are left open with few buildings and without extensive paving. No more than ten percent of the land should be covered by buildings.
2. Uses should be such that patronage at any given time is low so that large crowds are not attracted to the area.
3. Uses should be such that they are fully complementary to the Shoreline Park and in no way detract from the character of the park.
4. Uses abutting Stierlin Road shall be totally consistent with the boulevard character of that roadway with generous open spaces and setbacks.
5. Uses shall not add significantly to the noise in the area nor generate pollutants of any kind that would be detrimental to the recreational nature of the area.

6. All structures and uses shall be subjected to strict architectural control in keeping with the design of the Shoreline Park.

With respect to landfill in this open space area, the policy is to maintain the current minimum elevation ordinance and in addition to regulate the placing of fill throughout the area. The uses permitted under the policies stated above may or may not require fill depending upon the use. Where buildings are required, fill would be mandatory. In view of the fact that the parcels in this area (with the exception of the lands to the west of Stierlin Road) are large, it is proposed that fill plans be made on a parcel-by-parcel basis in accordance with the dictates of the uses proposed by owners of those properties. A specific plan prepared by the City should set forth a fill scheme, however, for the lands between Joaquin Road and Stierlin Road since these parcels would find it difficult to develop independent grading plans which would correlate with one another. This specific plan can be a simple one, setting forth a drainage pattern insuring drainage to the future Stierlin Road for those lands lying along Stierlin Road and drainage to Joaquin Road for those lands on the west. As to drainage structures, the large properties can be expected to design and construct drainage systems sending water to Stevens Creek on the east and for those lands west of Joaquin Road to Permanente Creek. Waters from lands between Joaquin and Stierlin would move to those streets and be collected at the south end of the park. Examination of the possibility of a drainage system in Charleston Road, or the new arterial replacing it, should be made to provide a system for the lands south of Charleston. For the lands west of Rengstorff, proposed for industrial and corporate office use, a grading plan tying into the Park and a drainage plan tying into the Fairview storm drain should be developed as these lands are subdivided and made ready for development.

<u>Land Use</u>	<u>Net Acres</u>
Industrial	370
Commercial	35
Open Space/Recreation	300
Net Acres	705
Road	145
Gross Acres	850

Transportation. The transportation facilities for the entire area shall consist of an arterial road system, a separated path for transit vehicles, a bikeway system on a separate right-of-way and an extensive pedestrian pathway system tying to the park. The arterial roads shall consist of Stierlin Road as a principal boulevard, a divided and well landscaped parkway, in effect extending the Shoreline Park to Bayshore Freeway. As a part of this boulevard, there shall be a separate path for transit vehicles and a separate bike path on each side of the roadway. One other arterial road through the area should be adequate and this will be an extension of Terminal Boulevard

running along the westerly side of the park and extending through the area in the approximate location of the Charleston Road right-of-way, continuing easterly across the creeks and to the National Government facilities. This arterial road system should also provide for an extensive transit pathway, bikeways, and pedestrian walkways. No new freeways are foreseen and the low intensity land use plan herein is consistent with this concept. It is recognized, however, that Bayshore Freeway is planned to eventually be widened to six lanes.

Community facilities for the area are limited because of the land use policies above. Schools, police, and fire facilities will not be needed in this area as reliance will be on the existing or planned facilities south of Bayshore Freeway. Stevens Creek Park should be broadened to include the areas subject to high earthquake risk along Stevens Creek.

Implementation. Implementation of the plan will require careful transition from current uses to planned uses to ensure the quality of development foreseen in the basic criteria and consistent with the Shoreline Park. This will require a Derivative Plan setting forth the details of staging, new ordinances, and financing plans.

Annexation will be a key tool in an implementing system and the city should make use of its powers to annex or not annex to secure the land use policies desired. This, combined with the power to extend or not extend utilities to the area, and the urban development policy techniques developed by the Planning Policy Committee of Santa Clara County could constitute principal regulatory methods especially in connection with the implementation of the open space category of uses. This will require careful cooperation with the County to ensure that urban uses are not permitted in the unincorporated areas.

Zoning will be a key regulatory device in achieving the policies of the plan. A new zone will be required for the open space commercial recreation activities designated for the area north of Charleston. Special zoning will be required for the industrial area adjacent to the Park and for the commercial area. Existing zoning and prezoning for the area must be changed consistent with the plan and consistent with the staging and transition required to achieve the quality of development desired.

With respect to the housing in the area southerly of Charleson Road, it is the policy that this be phased out over the next 20 - 30 years. However, in the interim every effort should be made to upgrade the condition of housing and the environment in the area and implementation devices should ensure that deterioration does not take place because of the long term, phase-out process. Displaced persons should be re-housed and other policies in the Housing Element should be followed. Upgrading of the existing housing can be ensured by an effective use of the housing code. Rehousing techniques should ensure that individuals displaced by new development or housing code action will secure an improved environment in Mountain View and that houses evacuated because they are substandard will not be used to accommodate new tenants. In unincorporated areas, this will require either careful implementation agreements with the County or annexation. Selective rezoning to industrial should be undertaken but care should ensure that the development of industrial uses does not degrade the residential environment. A staging plan for rezoning should be developed as

part of the derivative plan for the area. Again, vigorous use of the housing code, accompanied by a positive relocation program can ensure a minimum of social disruption.

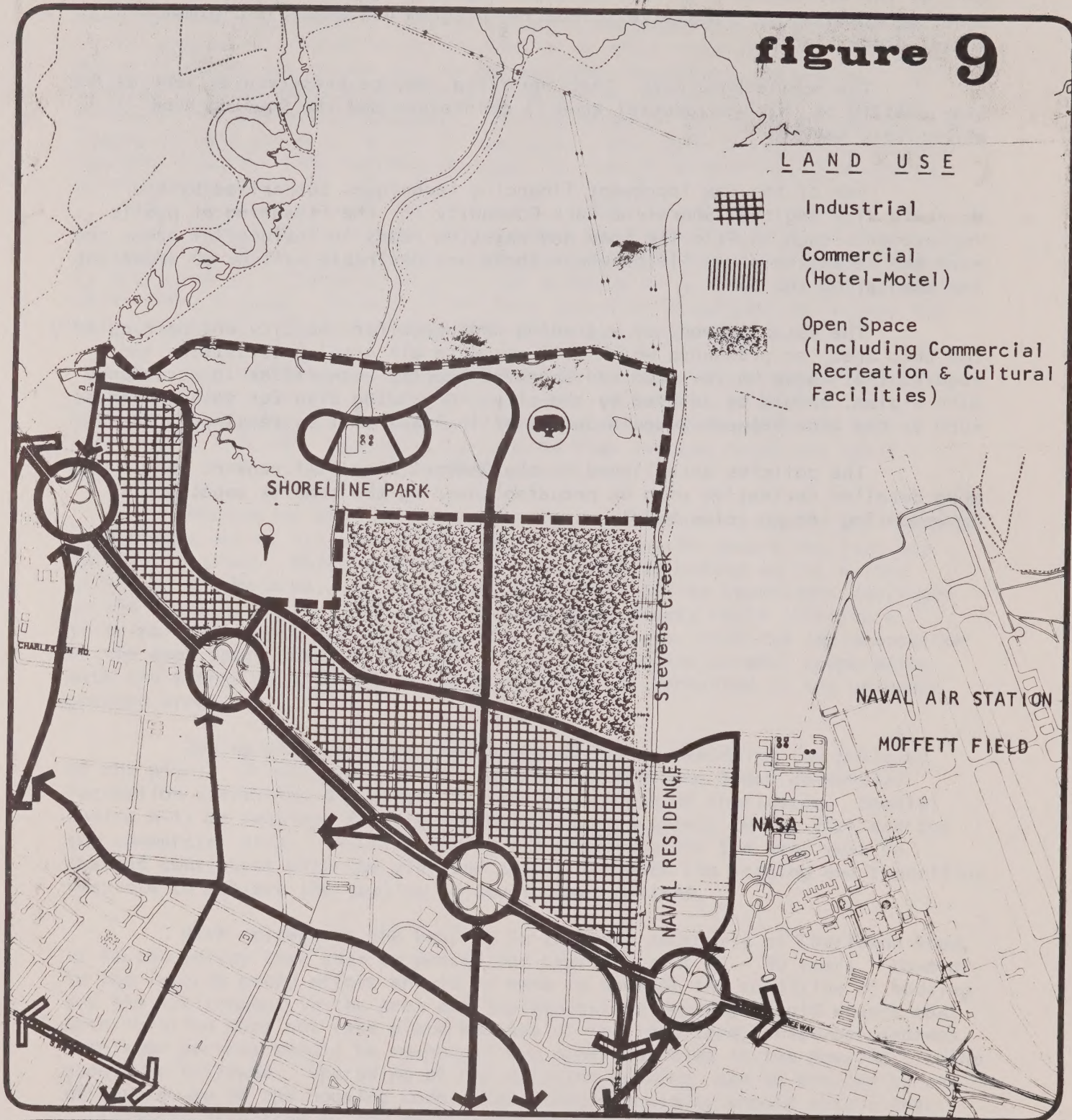
The mobile home park, Santiago Villa, may be preserved as long as the high quality of this residential area is maintained and the housing need is effectively served.

Use of the tax increment financing techniques authorized by the Mountain View Regional Shoreline Park Community for the financing of public improvements such as Stierlin Road and existing roads in residential areas and even the extension of utilities where these are desirable will be an important implementation tool.

The establishment of a grading ordinance for the city and particularly for this area, an ordinance which will regulate all grading activities and require that these be reviewed and approved by city authorities in accordance with a plan, should be adopted by the city. A grading plan for selected areas such as the area between Joaquin and Stierlin Roads will be required.

The policies established in the General Plan will require that a more detailed derivative plan be prepared covering the complex aspects of implementing the policies herein.

figure 9



NORTH BAYSHORE

MOUNTAIN VIEW GENERALIZED LAND USE

0 500 2000
100 1000
FEET

NORTH

AMENDMENT NO. 6, ADDITION OF THE OPEN SPACE AND
CONSERVATION ELEMENT

(Resolution No. 9618, adopted February 26, 1973)

INTRODUCTION

This element provides the policy for open space and conservation within the Mountain View planning area. Its base is found in the community goals which stress harmony and respect of both human and natural environmental needs. It is the basic premise of this Open Space and Conservation Element that for his physical and psychological well-being, man needs the natural environment maintained within the urban environment. The sounds, sights and experience of natural elements are essential to maintenance of a high quality of life. Basic to the relationship of man and nature is the realization that nature has a limited assimilative capacity available to man for his use. Also, nature is not benign so that in order to maintain the harmonious relationship, man must use the resource wisely in order to avoid its destructive forces.

DEFINING OPEN SPACE AND CONSERVATION

Both open space and conservation have broad meanings, particularly in an urban area. Because of the close alliance and overlapping nature of open space and conservation in this community, they are joined as a single element through their common tie to the earth's surface: land and water, and its use.

The term "open space" covers a wide spectrum ranging from vast non-urbanized expanses of land and water to the small spaces that are created between intensive development. Open space land has been defined by its purpose as natural resource land, agricultural land, recreational land, scenic land, water shed and ground water recharge land and wildlife habitat. These purposes are also served by open space water areas.

The earth's surface, in the sense of conservation, determines the relationship of man to his natural environment and to natural resources. The use to which man puts land and water and the policy he sets determines the effect on components of conservation: soil, minerals, vegetation, water and water forces, wildlife, water and air quality, and other natural resources. Misuse will lead to the destruction of these resources. It is essential that the open space and conservation components be coordinated in the planning process within a framework which reflects their related nature. Other elements of the General Plan also deal directly with many of the components.

In order to simplify the definitions, the following functional categories of open space and conservation have been derived for application in the City of Mountain View.

1. Natural Resources

Primary uses: Wildlife habitat; agriculture; water areas, watershed or ground water recharge land; green acres for the reoxygenation of the air; preservation of ecologically essential vegetation and historical, cultural or archaeological reserves.

2. Human Safety

Primary uses: Protection from geologic, seismic or flood risk; protection from noise; separation from transportation and utility rights-of-way for railroads, freeways, expressways, and high voltage power lines.

3. Scenic and Visual

Primary uses: A framework for the urban structure; linkages between open space areas; borders to delineate boundaries of certain uses; buffers; street medians and landscaped areas; fountains and water areas; pedestrian and transit passenger rest stops; unique scenic areas such as tree groves, trees or vistas; elements of site design on public and private property which help coordinate uses within the City; space between cities; space for timing urban growth; and space for relief from urban stress.

4. Recreational and Cultural

Primary uses: Parks, playgrounds, schoolgrounds, recreation facilities, bikeways, trails, areas for cultural activities, civic functions, quasi-public recreational uses and natural areas of educational value.

It is understood that a specific open space area may serve multiple or overlapping functions which encompass conservation and open space purposes. As an example, Stevens Creek Park Chain serves, among other things, as a wildlife habitat area, water area, buffer to the freeway and power line rights-of-way, linkage through the community, scenic asset, and a park or playground area.

In addition to the four categories listed, open space is occasioned by the failure to use lands committed for development. While such open spaces are important and policies for use of this land are enumerated in the implementation section, this element is primarily concerned with insuring a permanent commitment for open space and conservation for the community.

THE STATUS OF OPEN SPACE AND CONSERVATION LANDS IN MOUNTAIN VIEW

A geographic inventory showing, for each area of the City, existing and potential open space acreages by ownership and commitment to permanency has been prepared. Knowledge of ownership and use is important for the development of tools and programs to insure the permanence of open space. (While open space for yards and landscaping in conjunction with urban development has not been tabulated, the policies and programs set forth below will ensure provision of this open space on lands committed to urban development). Table 1 shown on page 3 summarizes the inventory by the subareas of the planning area.

TABLE 1

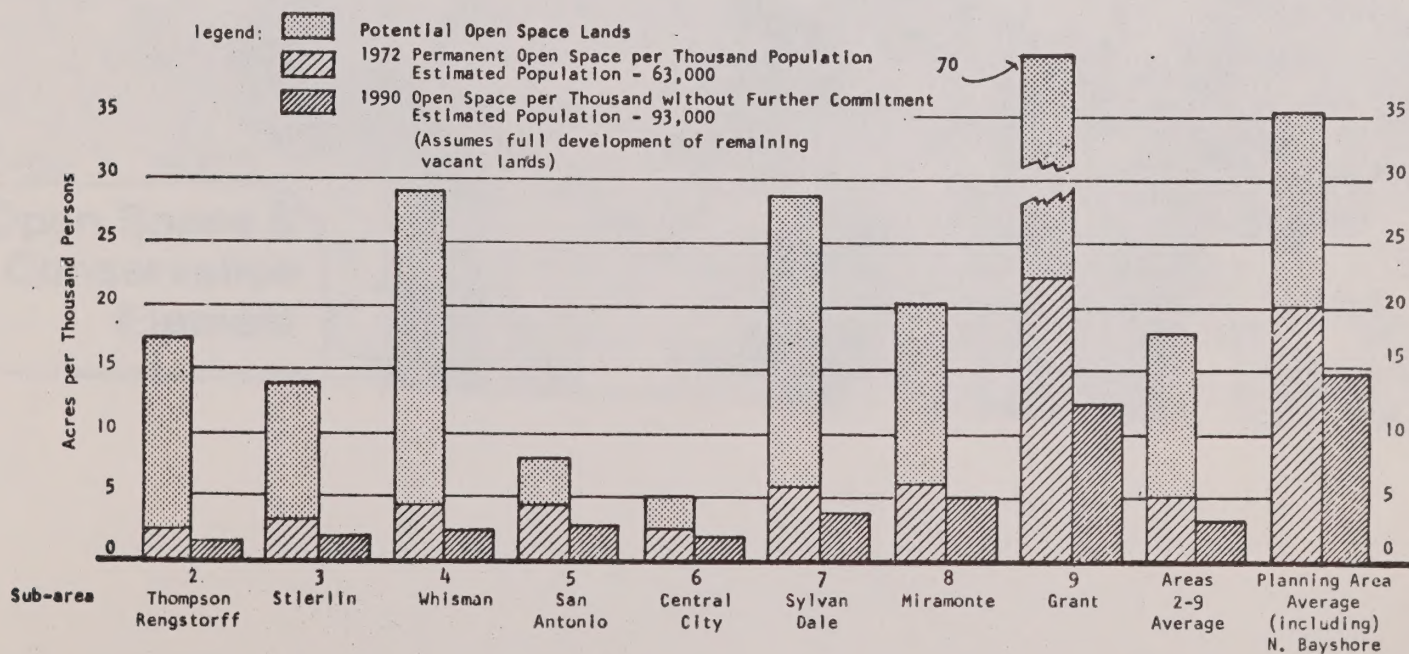
OPEN SPACE INVENTORY - EXISTING AND POTENTIAL (1972)

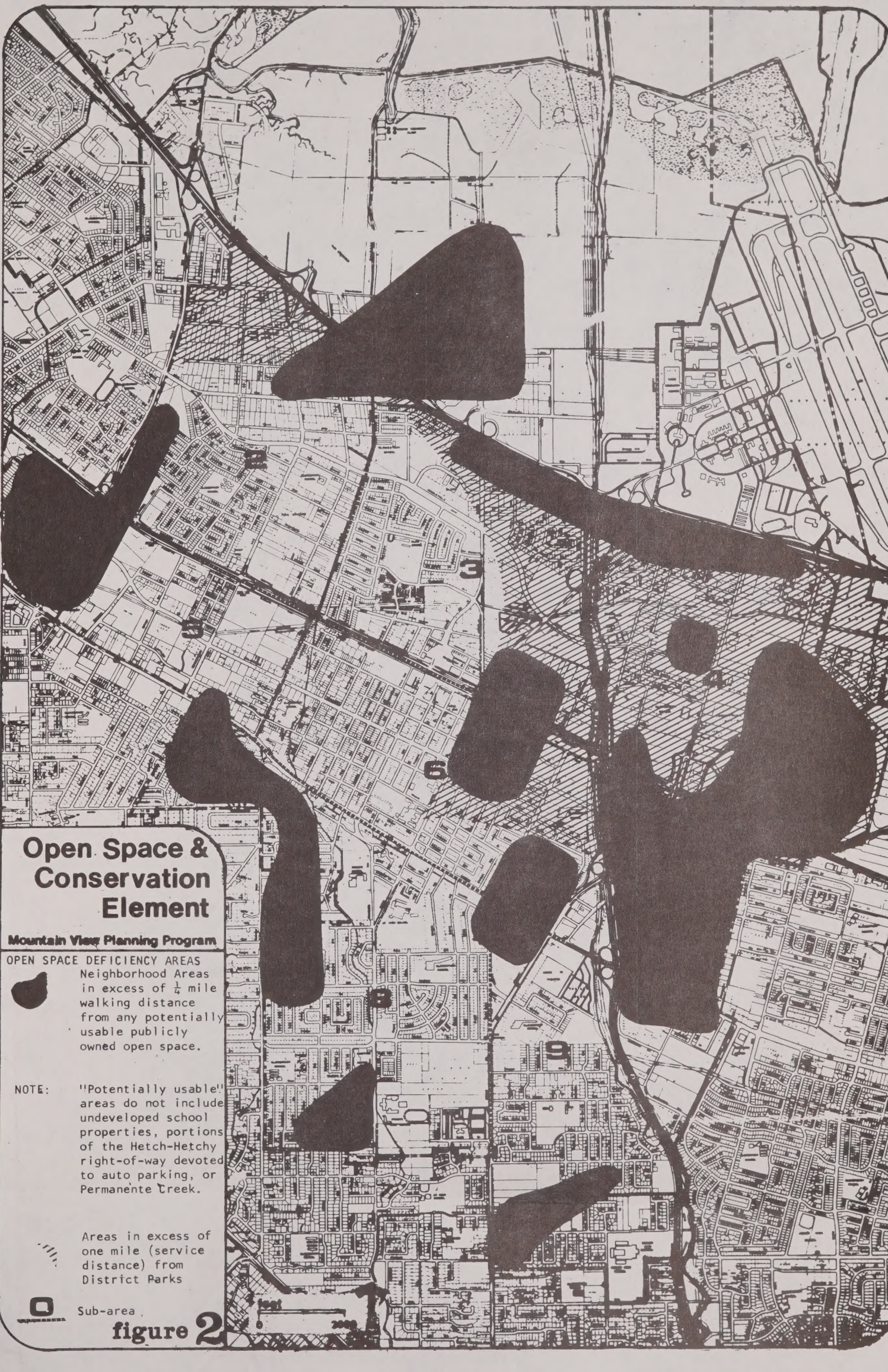
SUB-AREA	TOTAL ACREAGE	EXISTING PERMANENT OPEN AREA			POTENTIAL OPEN AREA			DEVELOPED LAND AREA
		PUBLIC PARKS LAND	PUBLIC SCHOOL PLAY GROUNDS	OTHER (QUASI-PUBLIC, AGRICULTURAL & PRIVATE COMMERCIAL RECREATION)	UTILITIES (OTHER THAN THAT USED FOR PARKS)	VACANT RES. OR AGRIC. (INC. UNDEVELOPED SCHOOL SITES)	OTHER VACANT (INDUST. COMMER.)	
1	3,990	580	-	380	30	140	360	450
1a		-		2050 (WATER AREA)	-	-	-	-
2	710	6	11	-	3	65	50	575
3	780	16	12	-	9	90	60	595
4	1,130	18	6	-	17	120	240	730
5	510	23	5	-	3	20	50	410
6	690	20	16	1	10	25	40	580
7	390	4	0	25	-	115	15	230
8	950	42	8	16	4	150	45	685
9	670	45	36	0	12	160	10	405
Planning Area Total	9,820	754	94	2472	88	885	870	4,660

figure 1

PLANNING AREA OPEN SPACE COMPARISON

Acres per Thousand Population August, 1972



A detailed street map of Mountain View, California, with several areas shaded in dark grey to indicate open space deficiency. The shaded areas are numbered 1 through 9. Area 1 is a large irregular shape in the upper left. Area 2 is a small shape in the upper left. Area 3 is a large shape in the upper right. Area 4 is a small shape in the center. Area 5 is a large shape in the lower right. Area 6 is a large shape in the center. Area 7 is a small shape in the lower center. Area 8 is a small shape in the lower left. Area 9 is a small shape in the lower right. The map shows a dense grid of streets and building footprints.

Open Space & Conservation Element

Mountain View Planning Program

OPEN SPACE DEFICIENCY AREAS

Neighborhood Areas in excess of $\frac{1}{4}$ mile walking distance from any potentially usable publicly owned open space.

NOTE: "Potentially usable" areas do not include undeveloped school properties, portions of the Hetch-Hetchy right-of-way devoted to auto parking, or Permanente Creek.

Areas in excess of one mile (service distance) from District Parks



Sub-area

figure 2

Figure 1 indicates that as of 1972, approximately 20 land acres of permanent open space per thousand persons exists in the planning area. Thirty-four acres of open space per thousand is added by the water area of the Bay. Most of this acreage is regional in nature and is shared by all residents of the Bay Area. Some of the major areas included are the 544 acre Shoreline Regional Park which will provide a variety of park facilities as well as essential access to the Bay, 300 acres of land to the south of Shoreline Regional Park where there is no basis for urban development and the approximately 50 acres of Stevens Creek Park Chain which provide a seven mile link to the Bay from the lands to the south. Only 177 acres of City-wide or local parks, equivalent to approximately three acres per thousand population (1972), are included.

Figure 1 describes permanent and potential open space acreage in relationship to present and projected population. The sub-area breakdowns provide a measure of the distribution of locally available open space within neighborhoods. Although all areas of the City share in the benefits of community open space, proximity to residential areas is a desirable and important characteristic of a neighborhood. Figure 2 which depicts areas in excess of $\frac{1}{4}$ mile walking distance from public open spaces such as parks and schools provides another measure of local accessible open space.

There is a diminishing amount of potential open space in close proximity to residential areas. While small parcels suitable for tot lots will generally remain available, larger parcels to be held for open space reserve are fast disappearing. Several areas within the City have little chance to achieve additional significant open space without major redevelopment.

OPEN SPACE AND CONSERVATION STANDARDS

While standards have been developed for some categories of recreational and cultural lands (Chapter 6, Section 11 of the General Plan) as one category of open space, no standards have been developed for the broad categories of open space, such as resource conservation, scenic and visual lands and human safety. By their nature, resource lands are not defined by man's desire to meet a set acreage standard but rather by the inherent character of the resource. Scenic and visual lands are largely a function of urban design, also eluding numerical definition. The presence of vistas is a function of the design of the immediate surroundings which permits the enjoyment of an unhampered view. Human safety lands are the function of the hazard involved and increasing knowledge is being gained about what standards should be applied, particularly in the case of noise and air pollution.

The desirability to man of each of these categories varies. Each, however, can share in at least one common characteristic; namely, providing a sense of release from the pressures of urbanization. Since the areas are not devoted to intensive urban uses, they can be left in natural settings or where necessary, designed to provide natural relief.

The proximity and availability of the open space and conservation lands are of particular concern in neighborhood design. These lands aid in defining the distinctive shape and character of the landscape; they provide the everyday view and use of open area to the residents; and, they distribute the ecological benefits inherent in open space throughout the community.

In addition to the acreage distribution (Table 1 and Figure 1) which describe quantities of open space and conservation land, there is the need to clarify the quality of the land as it relates to man's use in his immediate environment. The following guidelines shall be used in the preparation of specific area plans to help assess the value, design and quality of local open space and conservation lands throughout the community.

Guidelines for Evaluation of Neighborhood Open Space Needs

- A. High percentage of children: In areas with a high percentage of children a greater amount of open space should be provided. The form of the space should be within safe walking distance to residences. The open spaces may be small and shall provide areas for active recreation.
- B. High percentage of senior citizens: Where there is a high percentage of senior citizens who may have a greater number of leisure hours, particular attention shall be given to providing open space within easy walking distance. Recreational activities shall be provided that have particular appeal to this age group. The provision of shaded rest areas is essential.
- C. Availability of private open space or recreation facilities: In high intensity areas, particularly in older sections of the community where private open space has not been provided, additional public open space shall be provided. In areas where residential developments offer on-site open space and recreational areas, other permanent open space may be less important as long as on-site open space is available.
- D. Available open space: Where available open space land is scarce (Figure 1), a high priority shall be given to means of preserving and adding land. Special attention shall be given the development and redevelopment of lands to provide useable open spaces. Provision of small open areas, distributed throughout the neighborhood may be an alternative to a concentrated open area.
- E. General accessibility of open space: Where open space has limited physical access and serves principally as visual or scenic open space, its measure as open space acreage within a neighborhood shall be decreased. Open space areas such as private clubs or public golf courses which have limited usability or special purpose, shall follow the same guideline.
- F. Special purpose open space: Where an open space area serves principally a City-wide function, as in the case of special purpose activity areas, it might have less direct importance to the neighborhood.

THE OPEN SPACE AND CONSERVATION PLAN

The Open Space and Conservation Plan consists of two parts: 1) the establishment of open space and conservation area policies and 2) the map of open space and conservation areas of community-wide importance. (Figure 3).

AREA POLICY

The Bay, Salt Ponds and Marshlands. The large water area of the Bay regardless of how shallow it is, acts as a natural air conditioner for the region in such a way that our comfortable temperatures and humidity are dependent to a large degree on the Bay. The openness provides a vista of the surrounding hills.

The 1,075 acres of salt evaporation ponds within the Mountain View planning area constitute one of the City's most important natural resources. The water areas are the base for an ecological system consisting of micro-organisms, vegetation, invertebrate animals, fish, and wild fowl which migrate along the Pacific Flyway.

The marshlands on the rim of the Bay, like Charleston Slough, provide fish and wildlife habitats and contribute significantly to the re-oxygenation of the atmosphere, therefore helping to counteract pollution. These marshes and mud-flats serve man and are important as wildlife habitats; however, they are also extremely vulnerable and have been diminished in size by past filling and diking. The Charleston Slough which constitutes 170 acres of tidal slough and low salt marsh is currently held under Williamson Act contracts. It is an area teeming with wild fowl, including great blue heron and a myriad of shore birds.

In addition to being an important wildlife habitat, this entire area serves as a scenic and educational resource. It is justified for open space by its importance to the ecology of the entire urban area. The vulnerability of the area to earthquake damage and flooding adds human safety to the reasons for maintaining this open space.

- POLICIES:
1. The Bay, salt ponds and Charleston Slough are major natural resources and shall remain in open water uses.
 2. Any recreational uses or public access such as water-oriented recreation or bicycle and pedestrian-ways shall be of light intensity and be carried on in a manner which ensures protection of the natural ecology of the area.
 3. If salt production ceases, consideration should be given after thorough analysis to returning the salt pond areas to their natural state by removal of the outboard dikes.
 4. Upland activities that would endanger the water quality or natural character of the Bay shall be prevented.
 5. The Charleston Slough should be designated the Charleston Slough Wildlife Refuge Area.

Shoreline Park. The 544 acre Shoreline Park, located on the southerly edge of the salt evaporation ponds, will serve as a major regional recreation area. The area was formerly used for indiscriminate dumping, junk yards and marginal industrial purposes and provided no public access to the Bay. The park provides a means of access to the Bay, a vista of the entire valley; and provides valuable conservation services such as flood control, a habitat for migratory birds, and (on an interim basis) a valuable area for solid waste disposal.

- POLICIES:
1. Since the Shoreline Park is the key unifying element in the North Bayshore Area, it shall tie into all parts of the North Bayshore Area, including Stevens Creek Park Chain.

2. The park serves as the permanent edge of land area in the City beyond which no filling or urbanization shall be considered.
3. Shoreline Park, as a major public open space asset, shall be protected from incompatible uses.
4. The City shall use the opportunity provided by the solid waste disposal operations to foster ways of recycling solid waste materials.
5. The City shall foster use of liquid effluents from the tri-city treatment plant for alternate uses such as irrigation of the park, rather than discharge into the Bay.

North Bayshore Open Space and Recreation Area. The 300 acres of land lying south of Shoreline Park and extending approximately to the 10 foot elevation line are devoted almost exclusively to agricultural purposes. The soils are suited to truck farming and row crops. This privately owned area has a positive effect on the City by helping to reoxygenate the atmosphere, serving as a wildlife habitat area, absorbing water runoff from upland areas and providing a sense of expansive openness within the community. This area is needed as open space for human safety since it is characterized by a significant potential for flooding, subsidence and noise from surrounding uses, all of which make urbanization unsafe and undesirable. Detailed analysis of the problems can be found in "Policies and Physical Constraints Affecting the North Bayshore Area", Wilsey & Ham, 1971; as well as the Santa Clara County PPC reports for the Baylands of Santa Clara County (1970).

The development policies for the North Bayshore Area are contained in Chapter 4, A Design for Mountain View, of the General Plan from which the following have been extracted.

- POLICIES:
1. Uses within the open space and recreation area of the North Bayshore Area shall be such that lands are left open with very few buildings and without extensive paving.
 2. Uses should be such that they are fully complementary to the Shoreline Park and in no way detract from the character of the park.
 3. Agricultural activities shall be encouraged to remain within the area by whatever means is available to the City and by use of open space zoning, agricultural zoning and Williamson Act contracts.
 4. Policies contained within Chapter 4 of the General Plan and the Baylands policies of the PPC shall be followed in considering use of the lands within this area.

Streams, Channels and Streamside Parks. Unique resources with the planning area include the many streams and water channels which lead to the Bay. These deserve conservation. These streams are frequently in several ownerships and bear many easements which make difficult their uniform, coordinated maintenance in a natural state.

Stevens Creek extends from the Santa Cruz Mountains through the valley to the Bay. Approximately seven miles transect the City of Mountain View generally along the line of Stevens Creek Freeway. Approximately 50 acres of this land are owned by the City of Mountain View and designated as Stevens Creek Park Chain. Both the Santa Clara Valley Flood Control and Water District and PG & E hold easements over this land.

The park chain has the potential for a major natural recreation and wildlife habitat resource to the community. Some areas of the creek are in a natural state with water carried much of the year. Although sections of the creek right-of-way are narrow, other parts broaden extensively to provide vistas, unexpected within the urban scene. It is the design concept that the park chain will be maintained in as natural a condition as possible without the introduction of active recreation areas, paving or other such facilities.

Permanente Creek flows for approximately seven miles through the planning area to the Bay. Much of the creek north of Cuesta Drive has been enclosed in a box while other portions flow in a natural manner above ground with a mixture of man-made rip-rap banks or channel sections, and natural riparian streamside vegetation. Thus, only in a few areas, especially in the southern half of the planning area, does the term "creek" in any way accurately describe it. Potential exists for the creek in three ways: 1) maintenance and enhancement of existing natural areas, 2) creation of linear paths and trails, and 3) development of small mini parks or parkettes.

Adobe Creek, a concrete flood channel, borders the westerly edge of the city for a short distance, with most of the channel in the Palo Alto planning area.

Stevens Creek-Permanente Creek Flood Control Cross Channel is a concrete channel which extends approximately one mile from Grant Road to Stevens Creek. The channel is unattractive and closed off from public access. The potential exists for its redesign to give a more pleasing appearance in relationship to surrounding uses and to provide pedestrian and bicycle paths along its length.

- POLICIES:
1. Stevens Creek Park Chain and portions of Permanente Creek are valuable open space resources and should be conserved in, or restored to, their natural states. Portions of the channels which have been altered for flood control purposes have the potential for urban open space uses such as landscaped linkages and paths.
 2. Particular attention should be given to providing pedestrian paths and bikeways along linear, publicly controlled lands.
 3. The City of Mountain View shall work in close cooperation with Santa Clara Valley Flood Control and Water District in the design and choice of materials for the construction and change of elements of the creeks. Multiple use of the areas shall be insured.

4. Uses adjacent to the creeks and channels shall serve to enhance the appearance and usability of the creeks by preserving visible access, providing means for physical access and coordinating site development.
5. Public access to the creeks shall be assured and improved by means of pathways, access points and bridges. Additional lands shall be added to make the resources more accessible and usable for passive recreation.
6. Stevens Creek Park Chain shall not be infringed upon for major transportation right-of-way use or other non-open space uses.
7. All concerned agencies shall be required to take aesthetic, scenic and environmental benefits into full consideration when computing costs of alternatives for modifying the Stevens Creek Channel.
8. Wildlife shall be preserved primarily by vigilant protection of vegetation and habitat areas within Stevens Creek.
9. Appropriate measures shall be taken to halt erosion with the use of natural materials. More appropriate flood plain zoning and restrictions will be imposed rather than resorting to construction of flood control facilities where the option remains.
10. Use of the headlands and upstream water beyond the boundaries of the City are essential to preservation and enhancement of the channel characteristics in Mountain View. The City shall work to ensure the protection of these water ways and their linkage value within the county.
11. Those open space and conservation resources shall be made visually accessible throughout the City. Neighborhood design shall ensure the incorporation of the streams into the visual landscape.

Utilities and Transportation Corridors. Several major public utility and transportation rights-of-way exist within the City. Since most of these lands are in public ownership and carry restrictions with respect to development, they constitute potentially permanent open space within the community. All too often the jurisdictions with primary control give little consideration to the open space and conservation value of these areas. The result may be unattractive, fenced-off corridors tending to divide the community rather than to serve as visual and physical elements to link the various parts of the City.

The Santa Clara Valley Flood Control and Water District holds easements over most of the drainage channels and streams in the City. PG & E power transmission line rights-of-way also extend throughout most of the Stevens Creek Park Chain and along the southern edge of Shoreline Park. These two areas have been discussed above.

The City and County of San Francisco (Hetch-Hetchy) water line right-of-way consists of an 80 foot wide strip which runs east-west through the center of the planning area and occupies approximately 40 acres. Its principal potential

is its use in conjunction with the other open space areas both as an adjunct to such areas and as a link between them. Although presently severed at several points by private development and streets, it provides potential for developing a handsome public greenway system. Realization of this potential will depend upon maintenance of the available areas in public control rather than having them leased to private individuals for private use and upon proper public development and maintenance for such open space purposes.

Freeways, expressways and street rights-of-way compose approximately 30 percent of the City's land area. Some parts of such land may be considered a form of open space. In order to realize this vague potential, it is essential that street design includes particular attention to preservation of existing plant materials and addition of natural materials in place of some of the asphalt and concrete. Visually attractive landscaping can constitute a good use of many of the leftover parcels acquired, but excess to the street needs. Dense clusters of trees may serve to buffer the noise and pollution from the street as well as improve the appearance to the street itself. Some of these small "excess" parcels may be devoted to neighborhood garden lots or other neighborhood open space purposes.

All levels of government must be responsible for providing good buffering of these transportation facilities. The Southern Pacific Railroad right-of-way, for example, has a 100 foot right-of-way running east to west across the entire planning area. At present, it constitutes a bleak and unattractive corridor with little sense of design relationship to the rest of the community. More attractive landscaping of the area with safe pedestrian and bicycle paths must be provided.

- POLICIES:
1. All public or quasi-public utility and transportation corridors within the City will be considered to have multi-use open space and recreation potential for the community.
 2. All renovation, construction or use of these corridors shall be subject to review by the City of Mountain View as well as other jurisdictions in control. Joint review by all concerned organizations shall be established to ensure full coordination.
 3. Since utility and transportation corridors prove a base framework for linking adjacent lands, further development of such corridors shall include provisions for making these areas true open spaces with both visual and physical access where possible. To this end, ways shall be sought to blend transmission lines into the landscape through careful route selection or undergrounding.
 4. The City shall prohibit private use of these utility and transportation corridors where it tends to obstruct the continuity of their open space use and the City shall endeavor to re-establish areas where continuity has been destroyed.
 5. Greenways and buffer zones shall be established along freeways, expressways and streets where they serve an aesthetic function and where they are needed to protect adjacent areas from noise and pollution.

Neighborhood Open Space Areas. The City of Mountain View is characterized by a well developed parks and recreation system. The public facilities element

of the General Plan, Chapter 6, Section 11, provides a plan and standards for neighborhood parks by size, service area and facilities. A total of 18 neighborhood parks are depicted in the plan. At the present time, six neighborhood parks have been developed.

Most of the City-owned open space takes the form of active recreation park areas. However, this plan provides that additional types of public open spaces be provided within neighborhoods. These spaces would generally be smaller in nature, consisting of mini parks, tot lots or vacant lands which may be put to neighborhood use. The advantages of devoting the small or odd shaped parcels to such uses are the provision of local visual open space and small intimate spaces for people within a neighborhood. Additionally, consideration should be given to the development of community garden plots within neighborhoods for open space uses such as flower growing or organic gardening. Other public agencies may have lands which are undeveloped and which may be converted to such community open space uses.

- POLICIES:
1. The City shall maintain ownership of undeveloped lands which provide an open space potential. Should lands be sold, they shall bear open space deed restrictions.
 2. Mini-parks and tot lots are needed in many neighborhoods to give residents parks within easy walking distance. Because of the greater potential for acquiring smaller pieces of land at later times, acquisition of these lands shall be given a lower priority unless other neighborhood options are limited.
 3. Parks are more critically needed near low income and high density neighborhoods where open space on the dwelling site may not be sufficient to meet all residential needs.
 4. The City shall, where possible, join parks to schools and other publicly owned lands to ensure the maximum open space potential.
 5. The City shall acquire and use lands for non-recreational public open space purposes. Such lands may be used as community garden areas within neighborhoods or leased to private groups or individuals for agricultural use.
 6. Parks and recreation resources shall be equitably distributed throughout residential areas. Priority shall be given to areas having less than the standard area devoted to parks and open space areas.
 7. Community involvement in the development and maintenance of open space areas shall be fostered.
 8. In planting public remnants and private lands, clusters of large trees will be encouraged. Native materials shall be used where possible to reduce maintenance.

Quasi-Public Open Space and Private Undeveloped Lands. Private schools, equestrian uses, golf courses, private clubs, and recreation facilities provide valuable visual and recreational open space. It is essential that a portion of the community be devoted to such uses on a permanent basis in order to provide the citizens of the community with needed diversity of cultural and recreational activities. Public action in the form of zoning regulations, specific plans, acquisition of easements, and tax policies must all be formulated to maintain these quasi-public and private components of the open space plan.

Few agricultural parcels remain but those that do constitute important open space. Moreover, they keep land from being developed more intensively.

Vacant lands within a neighborhood serve as "unofficial" or "accidental" open space, provide a sense of openness in an area and often offer area for unstructured play by residents.

- POLICIES:
1. The City shall endeavor to retain existing agricultural, recreational and other private open space uses as viable uses throughout the community, and efforts to establish similar new open uses compatible with surrounding developments shall be encouraged.
 2. Specific area plans shall incorporate provisions for both public and private open space facilities.
 3. The City shall encourage those private lands with open space potential to be maintained in open uses. Tools, such as the California Land Conservation Act contracts (Williamson Act) shall be fostered to help realize the open space usage.

Historical, Archaeological and Cultural Resource Areas. In order to maintain a link with the past (to better understand the present and the future), particular attention should be given to preserving historic sites and making them focal points within the City. Within this category are the few remaining old residential structures, remains of the Ohlone Indian encampments, trees and historical sites of interest.

- POLICIES:
1. The City shall adopt an ordinance establishing policies relative to the unearthing of archaeological remains, destruction of historic buildings and preservation of objects, resources or areas of historic significance.
 2. Historic homes or unique resource areas may be joined to parks or become the sites of historic parks, where practical. Relocation of historical buildings may be necessary.

Visual Open Space. All open space is visual. However, it is extremely important to the quality of life in Mountain View that there be a strong sense of the "presence" of open space. The quality of development and the attention to open space design will have a good deal to do with this. Use of significant amounts and well designed landscaping in conjunction with residential, industrial and commercial development can provide a pleasant view and rewarding experience to the entire community.

In a broader sense, Mountain View must maintain the sense of vista from which its name was derived. Smog or misplaced local development can obscure our view of the mountains and the Bay.

- POLICIES:
1. The City shall continue to ensure that private and public development provide a high proportion of private open area.
 2. High rise buildings shall be clustered and located so as to present a focal point within the community and not constitute obstruction of attractive vistas.
 3. Air pollution has a negative effect on visual clarity as well as the physical health within the community. Reduction in pollution must be sought to enhance this community's open space assets as well as meet basic health needs.
 4. Regional protection of the Bay and hills is essential to preservation of major vistas.
 5. Design of public and private open space shall ensure visual access to enhance the everyday presence of open areas.
 6. Existing obtrusive manmade elements, such as overhead utilities, which detract from the landscape shall either be eliminated or blended into the environment.

IMPLEMENTATION PROGRAMS

Realization of the policies in this open space-conservation plan will depend upon strong means of implementation. Many programs are implicit in the policies suggested. The following section expands upon these potentials.

The central element of implementation will be the application of funds. The priorities of open space must be sorted and ranked against other community needs and provided for in the Capital Improvement Program. Through effective community organization and effort, open space can be achieved by involving significant citizen input.

Important implementation programs for open space include the following:

1. Support of State and Regional Open Space Measures. In order to be successful, county and regional open space measures will need the support of all communities. The City of Mountain View recognizes the essential nature of the regional open space needs of the citizen and as a policy will support regional open space measures with leadership and revenues. The City will pursue application of regional funds to open space areas within the planning area limits, particularly the shaded areas of Figure 2: Stevens Creek Park Chain, Shoreline Park, Charleston Slough and the Bay area.
2. Support of State and Regional Conservation Measures. Major conservation matters such as air quality, water quality and noise are in many aspects beyond the bounds of the local jurisdiction. The community shall continue to participate actively in regional programs seeking to resolve these problems.

3. Support of Inter-City Conservation Measures. Coordinate inter-city efforts to establish uniform conservation policies, procedures and ordinances pertaining to such items as control of solid and liquid waste disposal processes, with particular attention to the industrial waste flows into the tri-city sewage treatment plant.
4. Inter-Agency Management. The City shall maintain liaison with those jurisdictions having responsibilities for potential open space resource areas within the City. PG&E, Santa Clara County, the Department of Transportation Hetch-Hetchy, City and County of San Francisco, the school districts, and Santa Clara Valley Flood Control and Water District are all agencies having some responsibility for open space and conservation lands areas. It is necessary for the City to insure coordination with these organizations so that multi-use areas are assured and so that community open space concerns receive high priority. As has been done with Stevens Creek Park Chain, detailed implementation plans will be prepared to guide implementation.
5. Specific and Derivative Plans. Specific area plans for neighborhoods of the City shall include greater details on the means for gaining, achieving and implementing open space within the planning area. Using this element as a base, these specific plans will provide guidance with respect to implementation, phasing and application of open space standards throughout the community. Derivative plans for specific open space areas and conservation needs may be developed.
6. Conservation Guidelines. Specific conservation guidelines shall be developed for evaluation of projects and actions in the City in light of the policies set forth herein.
7. Open Space Zoning. Open space zoning will be developed for the community and applied to ensure compatibility with the General Plan. The open space and conservation zones shall be applied to public as well as private land holdings. Such zones shall include provisions for each of the four functional categories of open space lands: Natural Resources, Scenic and Visual, Recreational and Cultural, and Human Safety. Zones other than the open space zones shall provide for conservation of natural resources, attention to environmental constraints and open space criteria.
8. Site Plan and Architectural Review. The City shall continue the program of site plan and architectural review for all private development within the community. This review in the past has significantly improved the appearance of and attention to site and building improvements. The purpose of this review program is to give attention to coordinating adjacent uses, incorporating new uses into the existing fabric, providing adequate open spaces and protecting natural resources. This process also provides additional means for coordinating the private implementation of land uses within specific area plans.
9. Application of Open Space Incentives. Local programs shall be established to provide incentives for maintaining private lands in open space and for insuring open space within future development. The incentive programs may include discounting the cost of well water for agricultural or floriculture purposes which maintain lands in open uses, and endorsing and seeking new ways of providing tax relief to land held in open space.

uses, such as the Williamson Act. Incentives may be contained in the zoning ordinance to encourage developments which provide exceptional open areas.

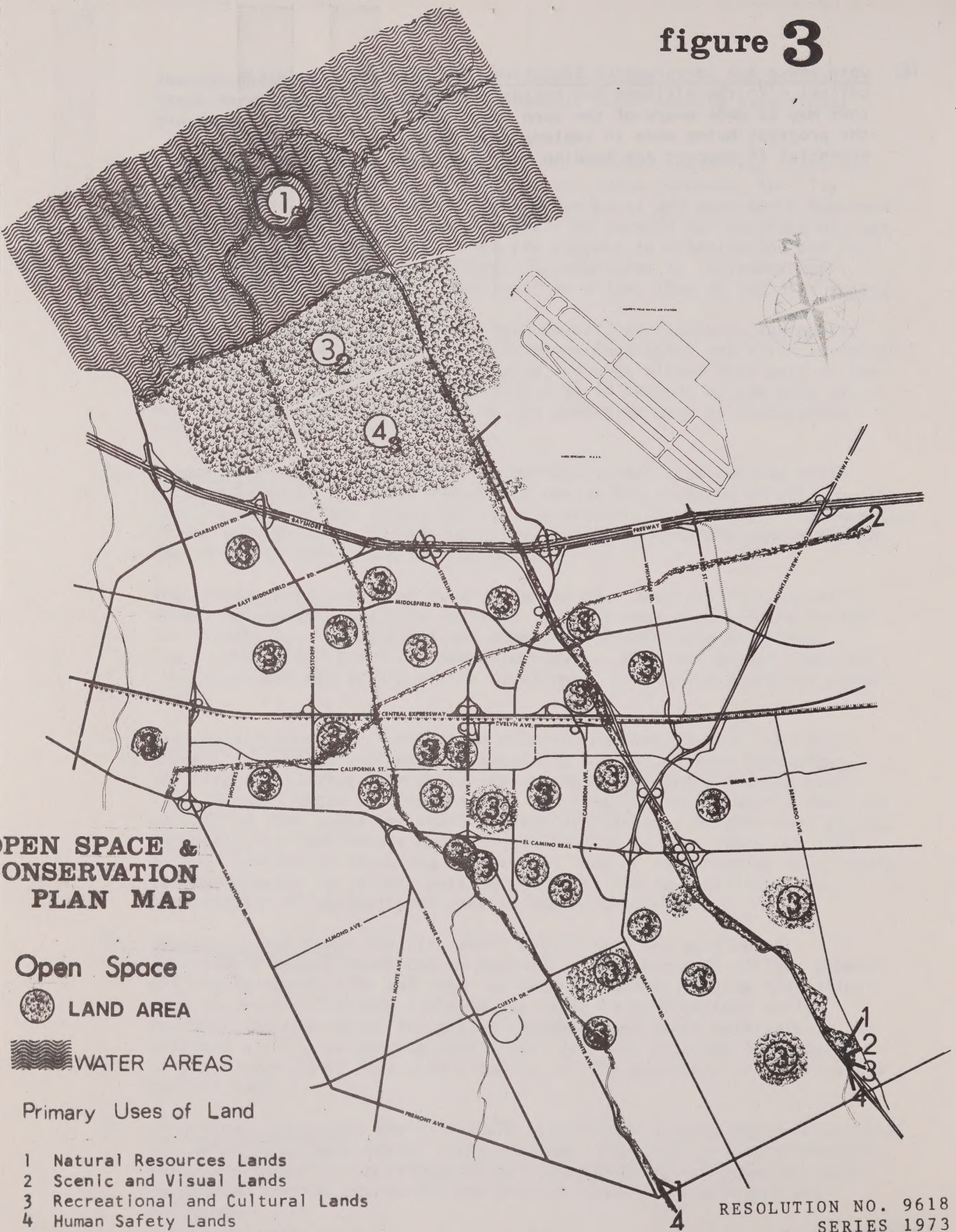
10. Local Open Space Funds. In addition to a constant search for state and federal funds which may be applied to open space purposes, the City shall continue subdivision assessments for parks and open space purposes. Citizen supported bonding measures shall be pursued for purchase of open space and conservation lands which are subject to urbanization and for accomplishment of open space plans. Expenditures to implement the Open Space and Conservation Plan shall be a line item in the City budget.
11. Public Improvements. All public improvements, particularly for public facilities such as streets, transportation facilities and civic buildings, shall respect the need for landscaping and open vistas as a part of the public responsibility. Approximately 5 to 10 percent of the cost of major projects shall be devoted to the amenities such as landscaping and street furniture.
12. Street Trees and Excess Lands. The current street tree program shall be structured to allow for systematic review and planting of all residential, commercial and industrial streets within the community. The success of the program rests largely with the ability to maintain continuity of the plantings throughout the community.

Small City-owned pieces of land which may have resulted from street or other improvements shall be included in the street tree program review and replanting. Large trees and other native materials which are "self-sustaining" shall be used extensively. Both the street trees and remnant pieces are assets to the development of citizen sponsored plantings.

13. Land Bank Program. In conjunction with the Housing Element, the City plans to undertake a program of acquiring parcels of land throughout the City and holding them until low and moderate income housing conditions warrant their development. In the interim, these parcels shall be considered open space and shall be made available to neighborhood groups, residents, or individuals who will put them to an open space use such as floriculture or gardening. This same idea of land banking shall apply to lands needed for future park development, public facilities and preservation of agricultural uses in public ownership.
14. Beautification Fund. The City shall establish a set portion of each yearly budget which can be applied to or granted to citizen groups willing to devote time and labor to neighborhood open space beautification projects. The fund would be available for professional design guidance, purchasing of irrigation equipment and plant materials to aid citizens willing to develop mini parks, tot lots or other landscaping on City-owned land, land within public utility easements or on privately donated land.
15. Historical Landmarks. The City shall institute a program which inventories all existing archaeological sites, natural historical points of significance and historical buildings within the community. Ordinances shall be adopted for the protection and preservation of these places and buildings.

16. Open Space and Conservation Education. The City shall maintain communications with the citizens and businesses within the community so that they may be made aware of the open space and conservation programs and the progress being made in implementing this plan. Education will be essential if support and funding for open space is to be forthcoming.

figure 3



AMENDMENT NO. 7, GENERAL PLAN TEXT REVISION

(Resolution No. 9630, adopted March 12, 1973.
The text following replaces the text of Chapter 3,
GOALS, of the General Plan.)

CHAPTER 3 - GOALS

Preamble:

The General Plan is not merely a forecast or a prediction of what Mountain View will be in the future; instead, the General Plan represents purposeful direction - the hopes and aspirations of its citizens. The plan is a process for unifying policies relating to all phases of the living environment - social, physical and economic.

The goals contained in this section set the basis for the policy of the General Plan elements that follow. The goals were derived from the citizen goals program (Search) and shall be the subject of continual review and appraisal. Each of the general goals is followed by a series of sub-goals which give more specific direction. The categories cover broad areas of community activities, overlapping all of the General Plan elements.

The goals provide an aim, direction or ideal; they may be stated in general terms or give very specific direction. The terminology surrounding goals, sub-goals, objectives and policies is complex largely because individual opinion and viewpoint plays an important part in distinguishing one from the other. In all cases the statements of this section provide the main component of a goal, they provide direction, a sense of what the City should be, a sense of what the City can be.

The following goals are intended to foster a high quality of life in a community which respects and balances human and natural environmental needs.

I. COMMUNITY IDENTITY

FOSTER AS THE COMMUNITY IDENTITY THE SENSE OF FULL CITIZEN PARTICIPATION, GUARANTEEING AN OPPORTUNITY FOR EVERYONE TO SHARE IN THE ACTIVITIES, RESPONSIBILITIES AND BENEFITS OF COMMUNITY LIFE.

- A. Extend the opportunity to all citizens to participate actively in the city's planning and decision-making process since involved, spirited citizens provide the real base of a stable community. Encourage balanced participation representative of the diverse economic and ethnic makeup of the city.
- B. Support an action program to provide a balanced representation of men and women of all economic and ethnic groups on the city staff and on appointed bodies.
- C. Stimulate neighborhood and city-wide projects based on active citizen participation both in terms of ideas and labor.
- D. Establish greater coordination and exchange between the city and the school districts in order to achieve a fuller sense of community.
- E. Encourage fuller city involvement for residents and personnel of NASA and Moffett Field. Ensure cooperation in the planning, use and development of the federal facilities within the Mountain View planning area.
- F. Serve as a coordinator of public and private groups which affect the city.
- G. Encourage the continuance of the multi-ethnic nature of the city and stimulate increased cultural awareness and activity.
- H. Expand the means and techniques of communication between and among city government and its citizens, including but not limited to the encouragement of improved media coverage of community meetings and activities.
- I. Encourage the incorporation of county land within the Mountain View planning area to foster city unity.

II. VISUAL IDENTITY

EVOLVE A CLEAR, VISUAL IMAGE OF THE COMMUNITY WHICH REFLECTS THE HIGHEST STANDARDS OF DESIGN QUALITY FOR BOTH THE PUBLIC AND THE PRIVATE SECTORS.

- A. Create for the city a visual image through a community design approach which harmonizes the diverse public and private development of the city.
- B. Develop intra-city ties by creating a functional and aesthetically pleasing system of transportation corridors, pedestrian ways, bike paths and landscaped open areas which harmonize development in areas of transition.
- C. Clarify major entry points to the city, using signing and landscaping.
- D. Give firm guidance and direction to public and private development, striving for high quality, aesthetically relevant development and permanence of design and construction. In commercial areas, encourage a coordinated design approach to common elements such as parking and signing.
- E. Introduce innovative technological techniques and design ideas which will improve the environment.
- F. Develop a positive program to encourage and facilitate continued maintenance and upgrading of all existing industrial, commercial and residential development.
- G. Locate, identify and prepare programs to preserve buildings and places of historical or cultural significance which have educative or commemorative value and which can be retained or marked so as to fit harmoniously with existing and new development.
- H. Continue to make extensive use of landscaping, street trees and green belts throughout the community to make the city more attractive. Integrate mature trees, clusters of trees and natural areas into the fabric of existing and new land uses.
- I. Eliminate existing obtrusive man-made elements, such as overhead utilities, introduced onto the landscape but without relationship to it.

III. ENVIRONMENTAL QUALITY

ASSURE THE PRESERVATION AND ENHANCEMENT OF THE NATURAL ENVIRONMENT AND HUMAN LIVING ENVIRONMENT OF THE CITY.

- A. Preserve local open space and recreation resources which are essential to the quality of community life.
- B. Allow development only in accord with the needs of the community, not as the result of development pressures. Maintain strict control over those developments which present a threat to the health and safety of the citizens.
- C. Ensure that the population of the community is based on the ability to maintain a quality urban living environment. Preserve the sense of balance within the community so that the living environment remains desirable and sensitive to the natural human spirit.
- D. Ensure that urban growth is made in accord with and respectful of the natural environment of the area. Particular attention shall be paid to remaining natural streams, the bay and the visual relationship to the surrounding hills.
- E. Work to prevent and eliminate the pollution of the environment brought on by the forces of man. Solid waste, sanitary waste, preservation of clean water and clean air shall be all responsibilities of the city in conjunction with the regional needs.
- F. Develop visual aesthetics including building design, signing and public improvements as a major responsibility of the city.
- G. To protect people by preventing and suppressing the intrusion of objectionable levels, frequencies and time durations of noise in the city through controlling noise at its source, or by treating the path of noise propagation and protecting people from the effect of noise.
- H. Ensure that extensive use of trees and landscaped areas is made on private and public lands to provide shade, cool the atmosphere, replenish oxygen and increase the beauty of the city.
- I. Use the General Plan as the primary policy base for decisions on the living environment. Development shall conform to the General Plan and deviation shall be considered only with the strongest justification.

IV. HOUSING

STRIVE FOR A PERMANENT STOCK OF DECENT HOUSING WHICH IS AVAILABLE TO MEET THE NEEDS OF ALL MEMBERS OF THE COMMUNITY REGARDLESS OF AGE, INCOME, RACE OR ETHNIC BACKGROUND.

- A. Ensure that the community offers a variety of individual choice of tenure, housing type and location. Improve the balance in the number of lower and higher density residences.
- B. Establish, maintain and enhance the character, quality and livability of existing residential areas. Eliminate deficient housing and prevent future blight by a program of conservation and rehabilitation of existing structures and replacement with new structures.
- C. Improve the neighborhood concept for residential areas and encourage an economic and racial mix to reinforce this concept.
- D. Eliminate racial and ethnic discrimination in housing by establishing affirmative action housing programs.
- E. Maintain a leadership role in regional and county-wide housing programs, especially in the areas of improving the operation of the housing market, support of housing subsidies to meet the housing needs and combating discrimination. Encourage the sharing of responsibility for housing throughout the region.
- F. Stimulate the provision of a mixture of quality housing which is commensurate with the reasonable growth needs and the maintenance of a quality living environment.
- G. Encourage residential permanency by developing pride in the community, by insuring construction of the highest quality and by fostering economic opportunity.
- H. Encourage home ownership in all types of residences.
- I. Encourage added housing choice to disadvantaged groups.
- J. Ensure that decent housing for low-income families is available.
- K. Ensure that the design of housing structures is of the highest quality and that the buildings become part of the neighborhood, not isolated from it.
- L. Families displaced by new private and public development should be rehoused with equal or better housing within the city.

V. TRANSPORTATION

PROVIDE A FULLY BALANCED TRANSPORTATION SYSTEM WHICH IS INTEGRATED WITH A REGIONAL SYSTEM AND PROVIDES TRANSIT OPTIONS FOR EVERYONE IN THE COMMUNITY.

- A. Implement a workable local transit system for the needs of all citizens, but especially for those who cannot participate fully in the economic and social life of our community because of inadequate transportation; i.e., the elderly, the poor, the underemployed and the young.
- B. Demonstrate regional leadership and cooperation in ensuring the eventual development of a regional rapid transit system based on sound planning principles.
- C. Base future transportation planning and action on the concept that there must be decreased dependence on the automobile as the principal mode of transportation and allocate resources accordingly. Use innovative techniques and study new approaches.
- D. Develop safe and pleasant pedestrian ways throughout the community.
- E. Provide for safe bicycle use throughout the community, in the form of bike routes, bike paths or bike lanes on streets, modifying where necessary existing or proposed street or subdivision standards.
- F. Design aesthetically pleasing transportation facilities which blend with the surroundings and complement the land uses they serve to link. Transportation facilities should tie parts of the community together, not divide it.
- G. Integrate the design of auto, rail, rapid transit, bicycle and pedestrian rights of way to minimize conflict and yet maximize potentials for interconnection. Apply innovative buffers, grade separation and imaginative features of transportation technology within Mountain View.
- H. Ensure that there is an adequate automobile street network which will minimize congestion and provide safe and efficient automobile use.
- I. Seek to design a transportation system which shields the community areas it traverses from noise and fumes and is designed to accept new forms of non-polluting transportation.
- J. Ensure that any transportation system is consistent with all other goals, particularly community identity.
- K. Reduce the total transportation cost to the community while meeting the above goals.

VI. PUBLIC FACILITIES AND SERVICES

OFFER TO ALL CITIZENS A WIDE RANGE OF PUBLIC FACILITIES AND SERVICES, PLANNED, CONSTRUCTED AND OPERATED TO HIGH STANDARDS OF EXCELLENCE AT THE DESIRED LEVELS OF SERVICE.

- A. Set the highest standards in the design, construction and maintenance of public areas.
- B. Ensure a variety of parks and open spaces within the City including the addition of small neighborhood parks, natural areas and cultural facilities.
- C. Provide high quality recreation programs of a diversified nature throughout the community.
- D. Maintain close coordination between the City and the School District in order that mutual facilities are used to the optimum potential.
- E. Foster quality education opportunities for all students. To aid in the accomplishment of this goal, racially and economically mixed residential areas will be pursued.
- F. Encourage educational programs for all age groups.
- G. Ensure that high quality library facilities providing a full range of services are available to the community.
- H. Provide a level of fire protection determined by the combination of service and acceptable risks which best meet community needs. Where properties constitute a potentially higher risk, owners shall provide supplementary safeguards.
- I. Secure a level of order maintenance and law enforcement that deters criminality, represses crime and protects and preserves the legal rights of all. Provide community-wide services which are effectively integrated in the police role.
- J. Assure that the city street system is designed so that all affected -- the motorist, the pedestrian, the bicyclist, and adjacent uses -- are equally considered.
- K. Improve substandard streets systematically throughout the City. Street widths and the provision of parking shall be commensurate with the adjacent uses and the aesthetic concerns of the community as well as traffic needs.
- L. Encourage family services, health facilities and children's day care centers for all citizens.
- M. Encourage cultural activities, especially in the major arts, which enhance the quality of living.

VII. ECONOMIC BASE

ASSURE A COMMUNITY CLIMATE WHICH ENCOURAGES ECONOMIC ACTIVITY AND FULL EMPLOYMENT, REWARDS CREATIVE ENTERPRISE AND PROVIDES THE MEANS TO REALIZE THE OTHER GOALS HEREIN.

- A. Foster commercial and industrial enterprise which creates the diverse economic base necessary for the economic, social and environmental health of the city.
- B. Strive to offer equal employment opportunities and urban services to a population varied in income, age, family composition, ethnic background and occupation.
- C. Maximize opportunities for people to both live and work in Mountain View in order to minimize the economic and social burdens of transportation and optimize a sense of community.
- D. Strive for a balanced allocation of city resources among all of the needs of the community.
- E. Make use of federal aid, state aid and other outside grants, consistent with community goals and standards.

VIII. CITY CENTER

CREATE AND MAINTAIN A STRONG, IDENTIFIABLE CITY CENTER WHICH OFFERS THE SURROUNDING COMMUNITY A CLUSTER OF GOVERNMENTAL, CULTURAL, RECREATIONAL, AND COMMERCIAL URBAN SERVICES.

- A. Plan and develop the City Center so that it serves as a visual and functional focal point to orient people to the city. Develop a well-defined city governmental center and cultural center to serve the community.
- B. Encourage and solicit the expansion of uses within the City Center which attract a wide range of interests, conveniently situated to the entire community. Retail uses such as restaurants and those offering recreation and entertainment shall be encouraged since they add vitality and encourage a night-time population.
- C. Assure the vitality of the City Center by emphasizing its character as a place of activity offering civic celebrations, cultural events, entertainment and the dynamic qualities of an urban retail market place.
- D. Support the City Center with a surrounding balance of residential uses which reinforce its vitality and provide an opportunity for a non-auto oriented life style for young and old.
- E. Create significant landscaped open areas in conjunction with large structural elements and intensive uses.

IX. REGIONAL RESPONSIBILITY

SHOULDER THE FULL SHARE OF THE COMMUNITY'S REGIONAL RESPONSIBILITIES ACKNOWLEDGING THAT THE CITY IS PART OF THE LARGER URBAN AREA AND THAT SOLUTIONS TO CERTAIN RESULTANT PROBLEMS MUST BE AT THE REGIONAL LEVEL.

- A. Maintain leadership in regional organizations and programs seeking solutions to the problems of transportation, open space, improvement of the environment, housing, pollution and growth.
- B. Share the regional financial burden and responsibility; and work to ensure that other governmental bodies also participate.
- C. Work to ensure that the urban region provides the benefits of a full range of cultural, recreational, employment and housing opportunities.
- D. Establish and preserve coordination with other communities, districts and agencies in order to avoid duplication, conflict and "single-purpose" fragmentation.

FIRE PROTECTION

CHAPTER 6, SECTION 4

CITY OF MOUNTAIN VIEW GENERAL PLAN

FIRE PROTECTION SECTION

The community fire protection system includes public and private organizations, personnel, facilities, equipment, laws and policy, all coordinated for life safety and property protection from fire loss through control, detection and suppression of fire danger. The objective of the community fire protection system is to provide an adequate level of fire protection at a reasonable community cost. Adequate fire protection for Mountain View is that specific combination of public and private resources which provide the services and acceptable risks which meet the needs of this community.

Means of Fire Protection

Community Fire "Protection" is a combination of two factors -- Public Sector Protection and Private Sector Protection.

Public Sector Fire Protection consists of the manpower and facilities supplied by the City. Traditionally, the design of the system has reacted to problems rather than planning to manage problems. To be effective, the system must be designed in light of the community's goals and capabilities. In addition to the job of fire suppression, public protection, to be most effective, must include structural design review, control of hazardous contents, fire code enforcement, continuing inspection, and coordination of building, planning, law enforcement and public works activities as they relate to fire protection.

Private Sector Fire Protection consists of fire resistive design of structures and materials, as well as fire extinguishing, warning and detection systems. Fire resistive structural elements limit the size of the fire problem by dividing a structure into manageable fire areas. Through automatic detection and suppression, built-in protection is intended to limit the scope of the anticipated problem to that which is manageable.

Fire insurance also serves an indirect function in fire protection by compensation for losses. In addition, the fire insurance industry evaluates the capabilities of cities to cope with conflagrations. The Insurance Services Office maintains a 1 to 10 grading system and establishes a basic insurance rate for each city. In a Class 1 city fire insurance costs less than in a Class 10 city.

Traditionally, cities have used this grading as the basis of their fire protection system design. Although the grading schedule provides adequate guidelines for conflagration control, it is not intended to meet the total fire protection planning needs of cities, since individual community goals and capabilities are not considered. The City of Mountain View will consider fire insurance rates and upgrading as one of the economic benefits resulting from adequate fire protection.

Fire Losses and Costs

The number of Fire Department responses in Mountain View has grown in direct proportion to the population with approximately 22 emergency calls per thousand persons over the past ten years. Increased concentration of people and goods, resulting from urbanization, has increased fire loss potential and reduced the effectiveness of traditional public fire protection methods. As concentration increases, building design, on-site automatic detection equipment, and private automatic and manual suppression facilities are of greater importance to reduce fire risk.

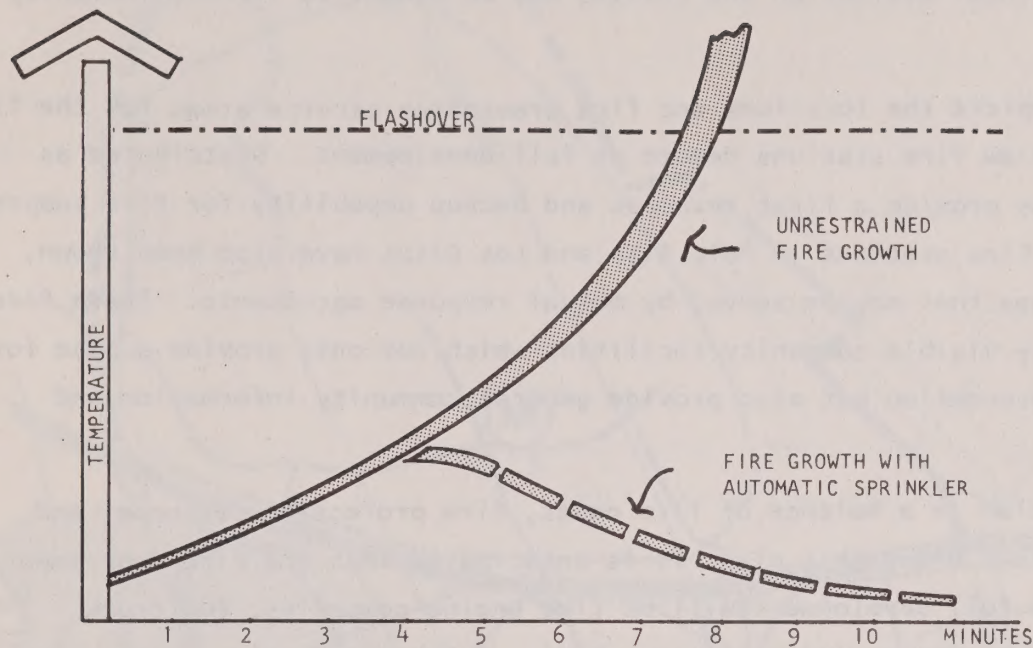
Along with increased fire losses, community costs, which include equipment and manpower, have also risen. With traditional community fire system designs, this trend of public cost can be expected to continue to increase in accord with urbanization. Only by planning for both public and private fire control responsibility can this trend be changed. In this plan, fire loss management is stressed as opposed to systems which merely react to new problems by adding more firefighting resources.

Reflex Time

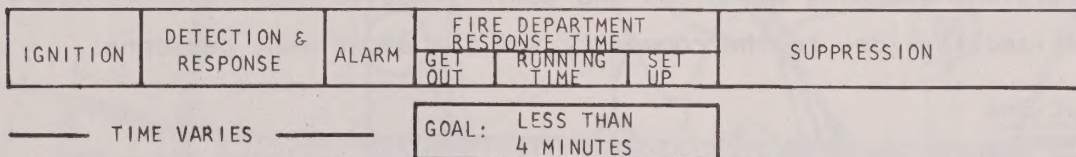
The concept of reflex time is useful in understanding the public and private sector responsibilities with respect to fire risks. Reflex time is the total time which elapses between fire ignition and eventual extinguishment, and is illustrated by Figure 18.

Upon ignition, fire intensity grows rapidly. While the rate of growth varies with the materials and conditions, a dangerous fire will climb quickly to a point referred to as "flashover", the critical point for life safety and fire control. One of the primary objectives of adequate fire protection is to control fires prior to flashover. Fire Department response time can be established by the system design. Historically, the time that elapses between ignition and alarm has been uncontrolled and fire extinguishment commenced only after arrival of firefighting forces. With automatic detection, a speedy alarm can be given and response time of firefighting forces can be reduced. With automatic suppression, fire danger can be controlled prior to flashover, and frequently prior to the arrival of fire fighting forces.

figure 18 | fire growth
reflex time



- fire growth -



- reflex
time -

THE COMMUNITY FIRE PROTECTION PLAN

The plan which emerges involves a combination of public and private responsibilities. The City shall establish a "normal firefighting capability" by building a fire protection force and providing equipment to cope with an anticipated fire risk. Standards will be set to define the level of public fire protection which is adequate to meet the normal needs at a reasonable community cost. Above that anticipated level of fire risk, built-in protection will be provided by the private sector. The community fire protection system shall include necessary public education programs, public ordinances, codes, structural design review, and code enforcement procedures. In addition, inspection and maintenance programs are required to assure the reliability of built-in protection. Fires which exceed anticipated severity will require the implementation of emergency operations plans which include mutual aid with neighboring cities.

There is an insurance rating that is optimal for this community at any point in time. The total community cost of changing the rating will govern the decision to change. In 1972 the Class 4 rating is optimum; however, the fire insurance rating shall receive continual evaluation and changes may be sought to improve community benefits.

Figure 18-a depicts the locations and fire prevention service areas for the five City of Mountain View fire stations needed at full development. Distributed as shown, the stations provide a first response and backup capability for fire suppression and rescue. Fire stations in Palo Alto and Los Altos have also been shown, indicating the areas that may be served by mutual response agreements. These fire stations are highly visible community facilities which not only provide a base for firefighting and prevention but also provide general community information and services.

The proposed plan is a balance of fire codes, fire protection personnel and capital improvements. Under this plan, it is anticipated that the Fire Department resources needed at full development will be five engine companies, two truck companies, one rescue company and battalion chief. A Fire Prevention Bureau, Communications Division, Training Divisions and administrative staff are necessary to provide specialized services to the community and the department personnel.

Fire Station Locations

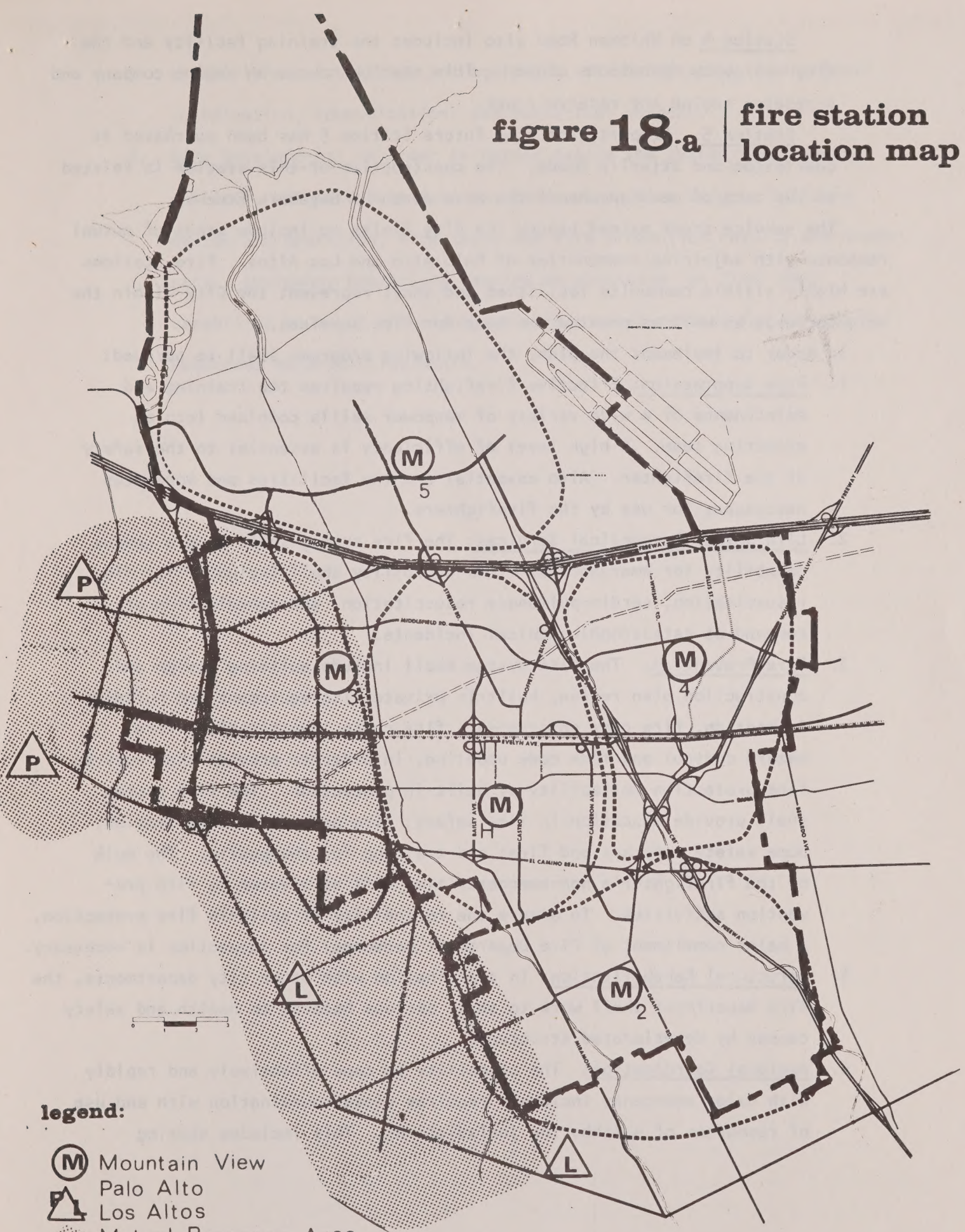
Fire stations provide many direct services within their assigned areas in addition to fire fighting functions. Among these are fire prevention and hazard control programs; fire safety education; and rescue, first aid and resuscitation service. Fire stations also provide communications and a service point between city government and the community and through their strategic locations, they provide the quickest feasible response to citizen requests for service.

Headquarters Fire Station at Villa and Franklin houses the administrative offices, the Communications Division and the Fire Prevention Bureau. The firefighting resources are: One engine company, one truck company, a rescue company and battalion chief. An expanded facility will be developed when funds are available.

Station 2 at the intersection of Grant and Cuesta houses one engine company and one reserve engine.

Station 3 at the intersection of Rengstorff and Montecito houses one engine company and one reserve hose wagon.

figure 18.a | fire station location map



legend:

- (M) Mountain View
- (P) Palo Alto
- (L) Los Altos
- Mutual Response Area
- Service Area

AMENDMENT NO. 8

RESOLUTION NO. 9631
SERIES 1973

Station 4 on Whisman Road also includes the training facility and the city emergency operations center. This station houses an engine company and a reserve engine and reserve truck.

Station 5. Property for this future Station 5 has been purchased at Charleston and Stierlin Roads. The construction of this station is related to the rate of development of the area north of Bayshore Freeway.

The service areas extend beyond the City limits to include areas of mutual response with adjoining communities of Palo Alto and Los Altos. Fire stations are highly visible community facilities and shall represent the City within the neighborhoods as well as provide the base for fire services.

In order to implement the plan, the following programs shall be pursued:

1. Fire Suppression: Effective firefighting requires the training and maintenance of a wide variety of manpower skills combined into an effective team. A high level of efficiency is essential to the safety of the firefighter. Also essential are the facilities and apparatus necessary for use by the firefighters.
2. Life Safety/Paramedical Services: The fire system shall have a rescue capability for emergencies. This capability shall include first aid, resuscitation, cardio-pulmonary resuscitation, and coordination of command at catastrophic medical incidents.
3. Fire Prevention: The fire system shall include building design and construction plan review, built-in private fire equipment and building inspection, fire code enforcement, fire cause investigation, fire hazard control and fire code updating, in order to provide the required fire protection reliability of built-in protection. The fire system shall provide education in fire safety, fire protection consultation, home safety programs and first aid training for the public. The bulk of the firefighter's non-emergency time will be devoted to fire prevention activities. To assure the reliability of built-in fire protection, a major commitment of Fire Department personnel for inspection is necessary.
4. Structural Rehabilitation: In coordination with other city departments, the Fire Department shall work to abate serious hazards to health and safety caused by deteriorated structures.
5. Regional Coordination: The capability to cope effectively and rapidly with major emergency incidents requires close coordination with and use of resources of neighboring jurisdictions. This includes sharing

capabilities, facilities and equipment, standardization, operational coordination, communications and logistical support.

6. Data Development: In order to better design the system (and measure results), adequate base data and feedback on fire danger, building design and operation, fire cause and fire prevention results are necessary. Emergency operations require an extensive "on line" data capability to enact efficient and safe control methods for fire and/or hazardous materials incidents.

contiguous to the Planning Area. In addition to their recreation value, these facilities fulfill other needs for open space as set forth in the Open Space Element of the Plan-- and should those golf courses no longer be required, they should be devoted to other open space uses.

McKelvey Park is shown as a special community-wide facility for baseball.

Pioneer Park, which will provide passive recreation for the Central City area, is shown as a part of the Civic Center plan.

A sports center containing 12 acres is shown adjacent to the district park in the North Bayshore area.

The General Plan incorporates many of the city-wide facilities in the shoreline park running in an east-west direction along the southerly dikes of the salt evaporation ponds (See Figure 16 - A Concept for a Shoreline Park). This would be developed as the lands, some of which are now being used for sanitary land fill, are raised to an elevation of 10 feet above sea level. This park will provide district and city-wide recreation facilities which will be required by the full-development population of 120,000. City-wide facilities would include the golf course and the sports center. Special park facilities serving the City, but which serve the north County region as well, can also be provided in this park. These may include an equestrian area, a zoo and a rifle and pistol range.

Regional Facilities

The 400 to 500 acre shoreline park shown on the Plan has a regional character. In addition to some of the special facilities to serve both the City and the region, the park can provide a sailboat lake which would be primarily a regional facility. The 50 acre lake would provide a facility for small

To adequately handle the basically residential traffic to be imposed upon it between Springer and Grant Road, a four lane facility should be developed (Street section C).

Dana Street - Dana Street shall serve as a collector street connecting the Sylvan-Dale area with the "Heart of the City" between Moorpark Avenue and Calderon Avenue. It shall also serve as a link with the freeway system tying into Highways 85 and 237. It should conform with the 4-lane design for California Street with which it connects (Street section C).

East Middlefield Road - East Middlefield Road, an arterial, should be developed to a six lane standard after 1985 (Street section A).

El Camino Real - As alternative routes become available and commercial development increases along El Camino Real, its function will change from an arterial route to a local business and collector street. Speeds will be reduced by the increased number of conflicting traffic movements. Through traffic will be diverted to more convenient routes. Commercial development planned for this vicinity will generate traffic in excess of the capacity of at-grade intersections to the degree that future traffic volumes will warrant the installation of grade separated interchanges and special channelization at major crossings. Interchanges will be required at San Antonio Road, Bailey Avenue, and Grant Road, due to heavy intersecting volumes. Left turns to El Monte Avenue from El Camino Real will require a "fly-over" to permit these movements. At other intersections along this route, careful planning should be used in laying out channelization. A minimum six lane divided route (Street section A) will be required throughout the length of El Camino Real in the Planing Area, with possible widenings for turning lanes at special locations.

PAGE 147

Ellis Street - Ellis Street will remain an arterial. An

Amendment No. 15, Addition of the Sound Element

INTRODUCTION

This Element provides the policy for the noise environment in the Mountain View Planning Area. Its base is found in the Community Goals concerned with the environment (Chapter 3 amended 3/12/73).

Sound is the sensation of hearing, that which is heard. Some sounds are desired, such as conversation, music, and warnings. Conversely, some sounds are annoying, especially those which cause interruption of personal activities such as sleeping, eating, conversation and simple relaxation. These unwanted sounds are noise. In many cases, the differentiation between wanted and unwanted sounds is a highly subjective judgment. The purpose of this Element of the General Plan is to delineate community goals, policies, and standards directed toward arresting the increasing level of noise within the City. The Sound Element is also aimed at long-range diminishment of the present noise levels within the City.

This Element recognizes the subjectivity of noise. Therefore, it is the fundamental intent of this Element to seek a balance, to insure the freedom of expression which may involve loud "sound", while protecting the right of other individuals not to be subjected to "noise".

GOALS

One of the basic goals of Mountain View, as stated in Chapter 3, is to "assure the preservation and enhancement of the natural environment and human living environment of the City". One of the adopted subgoals under this main environmental quality goal addresses the noise environment of the City:

To protect people by preventing the intrusion of levels, frequencies, and time durations of noise in the City through controlling noise at its source, by treating the path of noise propagation, and protecting people from the effect of noise.

OBJECTIVES

To further specify the intent and extent of this subgoal, a series of detailed objectives were developed.

There are six objectives which pertain to all forms of activity in the City:

- 1) These objectives relate, for the most part, to the general noise environment rather than any specific noise event. Specific noise events should be limited in accordance with Objective 4 below.
- 2) The accomplishment of these objectives and sound level guidelines should be consistent with a reasonable time and cost for compliance, safety, aesthetics, and the other goals and objectives of the City.
- 3) When the noise level in any area exceeds the sound level guideline set forth in this Element for that area, the achievement of that sound level should become the objective.
- 4) The noise level throughout the community should be reduced to and maintained at a level quiet enough to protect people from physiological or psychological damage or irritation.
- 5) The sound levels transmitted beyond or across one land use district line should be limited to the sound level permitted in the receiving district, and the responsibility for limiting the noise should be the responsibility of the people engaged in the activity producing the noise; and
- 6) Sound loud activities (parades, carnivals, block parties, etc.) are desired by the community-at-large and so can be considered "sound" rather than "noise" even though the measured sound levels may exceed the sound level guidelines. These activities should be permitted in any of the land use categories by special permit. Special permits are necessary to preserve the basic sound environment by controlling the number of activities exceeding the desired sound level of the subject district.

Additional objectives were developed for activities by land-use type. These specific objectives are limited by the general objectives noted above.

Transportation

The first of these sets of objectives by activity type is concerned with transportation. Transportation facilities, especially major roadways with high volumes of automobile traffic, are the major sources of noise in the community. Therefore,

anything which tends to reduce or limit the noise generated by these sources or which tends to limit the transmission of the noise from the transport-way to adjacent areas will have wide-ranging effects and will help reduce the overall noise environment. The objectives that relate to transportation facilities, therefore, may be the most important set of objectives since accomplishment of these objectives would have the most significant effect on the overall noise environment. These objectives remain as goals for the City even though some aspects of transportation noise cannot be controlled by the City due to preemption by other governmental agencies.

The first and primary objective is that the transportation system should not produce more noise than the allowed level of sound in the receiving district. This would require the noise levels produced by the transportation system to be less, or mitigated more, in residential areas than in commercial and industrial areas, unless the noise levels are reduced to the residential standard everywhere.

Current efforts at noise reduction should be directed at the existing system of roadways and vehicular traffic including cars, busses and trucks. As other forms of transit (fixed rail transit, bus systems, etc.) come into being, care should be taken to ensure that they respect this primary objective. Special standards may be needed to avoid peak noise level problems which would degrade the area but which may not be readily measurable using the L_{10} monitoring method.

Residential

The primary objective is that residential areas should be quiet in general, and quieter at night than during the day to protect the general need for undisturbed nighttime sleep and relaxation.

To achieve this generally quiet environment, the inside of residential structures, whether single-family detached units or common-wall units like apartments or condominiums, should be substantially free from internal (apartment to apartment) and external (outside to inside) sound transmission. New residential developments should be designed to protect the residents from existing noise levels if those existing noise levels are in excess of the sound level standards for this land use.

It is particularly important to protect uses such as schools, hospitals, libraries, churches and convalescent homes from noise in excess of residential standards because of their sensitivity to disturbance by noise.

Commercial

The basic objectives relating to commercial districts are that commercial areas may have a louder sound level standard than residential districts, but the standards should be quiet enough not to interfere with normal business and commercial activities.

Industrial

The sound levels for industrial districts may be higher than either residential or commercial district levels. Because of these higher allowed sound levels, industrial land uses bear a special responsibility to protect other land uses from these levels of sound. This is in keeping with General Objective 5.

Open Space

Objectives for open space land uses are divided into two sets; one for intensively used open space, like playgrounds, tennis courts, baseball fields, etc., and one for non-intensively used open space which is categorized by such functions as nature studies, quiet walks, contemplation and relaxation.

Generally, the intensively used open space sound levels may be higher than the non-intensively used open space levels.

Non-intensively used open space should be no louder than residential areas and should be protected from mechanical noises exceeding the non-intensively used open space district levels.

In any open space area, motor or other self-propelled vehicles should be confined to certain designated areas. This is designed to preserve areas in our community which are free from the introduction of mechanical noise.

Construction Activities

Where temporary construction and similar "noisy" activities are necessary in residential and commercial districts, they should be limited to daytime hours and should never exceed the sound levels established for industrial areas. Every attempt should be made to limit the sound level transmitted to the existing areas in keeping with the General Objective 5. These standards also apply to work done by the public utilities; however, it is recognized that the need for emergency repairs may be more important than the need for a quiet environment at any given time or place.

GUIDELINES FOR THE NOISE ENVIRONMENT

These guidelines are intended to serve as benchmarks against which specific projects, plans and ordinances can be evaluated with respect to community goals. They are not intended to be absolute standards or law but rather numerical

statements of Mountain View's goals for a desirable noise environment. These guidelines serve as a measuring stick for the noise environment which can be used in conjunction with other values inherent in the plan and other City goals.

The development of these guidelines and the rationale for their selection are covered in detail in Sound Element Background Report I, "Standards for Evaluating the Impact of Community Noise Levels". Primarily, the criteria provide that these guidelines should be based upon a level of noise quiet enough to ensure the protection of people and their activities.

On a long range basis, this protection should be to a level to allow easy verbal communication everywhere in the City. In areas where the existing sound level is currently low enough to preserve communication, 55dB(A), every effort should be made to keep the sound level from increasing above this level. In areas where the existing noise level is in excess of 55dB(A), a set of short term goals is appropriate to begin modification of the noise environment, to act as a midpoint between the existing situation and the long range goal. The areas fundamentally intended for people and their activities should be protected with lower sound level guidelines than other areas. The basic criterion for these areas is the preservation of the ability for normal speech communication in the most actively used residential areas. In other areas, the sound level guidelines do not need to be low enough to preserve normal speech communication but should be low enough to protect people from known physical damage. An additional criteria is that the noise guidelines should be technologically capable of being achieved at present, although aspects other than technology need to be considered in evaluating any specific case. These guidelines should be periodically reviewed to ensure that they remain a useful yardstick for the implementation of the City's goals.

These guidelines are listed below by land use:

<u>LAND USE</u>	<u>DAYTIME</u>	<u>NIGHTTIME</u>
Residential		
Interior	45dB(A)	35dB(A)
Exterior	55dB(A)	45dB(A)

<u>LAND USE</u>	<u>DAYTIME</u>	<u>NIGHTTIME</u>
Commercial		
Interior	45dB(A)	45dB(A)
Exterior	60dB(A)	60dB(A)
Industrial		
Interior	55dB(A)	55dB(A)
Exterior	65dB(A)	65dB(A)
Open Space		
Intensive		
Interior	45dB(A)	45dB(A)
Exterior	60dB(A)	60dB(A)
Passive		
Interior	45dB(A)	35dB(A)
Exterior	55dB(A)	45dB(A)
Transportation		
Freeways and expressways		70dB(A)
Arterial and Collectors		65dB(A)
Minor Streets		60dB(A)

NOTES:

- 1) At the boundary of any two land use areas with different Sound Environment Guidelines, the land use with the louder standard should be responsible for buffering its noise so as not to violate the sound environment of the adjacent land use.
- 2) All values are in L₁₀ levels indicating that the general sound environment should remain at or below the stated guideline at least 90% of the time.
- 3) Daytime extends from 7 a.m. to 10 p.m.
- 4) Nighttime extends from 10 p.m. to 7 a.m.

- 5) The interior sound levels exclude noise produced within the subject building or unit, whichever is smaller.
- 6) The exterior sound levels apply primarily in the areas most used by people for noise sensitive activities; for example, the patio and backyard areas of residential areas. It is recognized that there can be areas of transition between the louder and quieter areas. The transition extent of these areas should vary in accordance with the noise sensitivity of activities likely to occur in these areas, and with the suitability of noise attenuation methods other than distance.

These guideline numbers call for a lower sound level in residential areas to protect activities common to residential areas, like sleeping and relaxation. The exterior residential standards should be applied particularly to the outdoor areas most commonly used by the residents, e.g., backyards and patio areas. The guideline numbers for commercial areas allow for a higher level of sound than in residential areas, but these levels are still low enough to protect people from known physical damage and respond to the criteria for possible technological achievement. The interior commercial noise level guidelines are set low enough to preserve the capability of normal verbal communication. The industrial sound levels are allowed to be louder than commercial areas, but are still quiet enough to protect people from known physical damage from noise. The sound environment guidelines for non-intensively and intensively used open space are similar to the residential and commercial sound level guidelines respectively.

The transportation land use environmental sound level guidelines are set low enough to protect people in those areas from known physical harm. In addition, the guidelines are set lower for minor streets so that the areas adjacent to these streets, especially residential areas, would be better protected from traffic noise.

The existing levels of sound are included in Background Report 2. Details of the methodology used in obtaining these noise contours and a detailed explanation of the implications of these contours is included in Noise Element Background Report No. 2, "Noise Measurement in the City of Mountain View". The areas affected by implementing these standards are shown in Background Report No. 1, previously referenced.

FUTURE NOISE LEVELS

The future noise levels throughout the community are difficult to project. Since most of the noise in Mountain View is generated by traffic, there are two major variables which affect the level of noise in the community: 1) the volume of traffic on roadways throughout the City, and 2) the efficacy of noise control technology throughout the City on both noise produced by the individual vehicles and on the transmission of that noise from the roadways into the surrounding community.

On the basis of traffic volume alone, the noise level could be expected to increase by a logarithmic factor such that a 10-fold increase in traffic volume will cause a 10 decibel increase in the sound level, while doubling of the traffic volume will cause a 3 decibel increase in the sound level. Since the traffic volumes in the City are expected to no more than double, the increase in the noise level would be projected to increase only minimally. The noise level will not in all likelihood increase by this amount, however, because existing state laws require a reduction in the noise levels produced by various types of vehicles so that while the number of vehicles may increase, the noise produced by each vehicle must decrease. Estimates of future noise levels in the City therefore, vary from the levels projected purely by the increases in traffic volume down to an actual reduction in the present noise levels produced by efforts to reduce vehicle noise currently underway by the State and Federal Governments and, potentially, by the City. For these reasons no projections of future noise levels are made.

The noise environment should be continuously checked in the future against the levels measured in 1974 and as shown on the referenced maps. This monitoring should be used to evaluate the effectiveness of efforts to meet the City's objectives for the noise environment, especially as measured by the guidelines given above. If this future monitoring of noise levels indicates a significant rise in the noise environment, efforts should be undertaken to project the noise levels in order to indicate those areas of extreme noise hazard. Through effective use of the implementation programs, however, noise levels throughout the City should not increase above the existing levels.

One additional source of noise in the future may be alternate forms of transit, fixed guideway systems, busses, etc. These systems should be carefully examined to insure that they do not increase the level of noise in the community.

IMPLEMENTATION

Sound levels in the community can be reduced by controlling the three factors of noise propagation: 1) the source of the sound, 2) the path the sound travels, and 3) the receivers of the sound - the people who hear the sound.

Control Over The Source

The most effective method of noise control is preventing noise from being generated. All other methods of noise control only limit the area affected by the noise.

Vehicle Noise Most of the noise in Mountain View is produced by motor vehicles. The levels of noise produced by motor vehicles are controlled by the State under the State Motor Vehicle Code. Therefore, the local jurisdiction is preempted from controlling the levels of noise produced by this source. The City may enforce the State law to ensure that all vehicles within the City do, in fact, comply with the State regulations. This would help reduce the noise levels in the community by removing the very worst offenders, the loudest vehicles.

It should be noted, however, that the amount of noise reduction that will result by this effort will be limited both because there are only a few vehicles that violate the current State laws and because these laws are fairly liberal in the amount of noise the vehicles can produce and be legal.

New transit systems should be carefully evaluated to ensure that they do not adversely contribute to the noise environment.

Finally, the City should continue liaison with authorities at local airports to help ensure the optimization of flight patterns so as to provide for the least noise in the surrounding

community and to strongly urge these authorities to implement other technological changes directed to quiet aircraft.

Roadway Noise The roads themselves can be considered as a source of noise since their design can affect the amount of noise produced by the traffic they carry. Thus, noise levels, can be reduced by special design of the roads, the routing of traffic, and the setting of speed limits to limit the impact of noise in noise sensitive areas. Roadways can be designed to reduce the noise levels produced by vehicles passing over them in many ways; for example, by treating the roadway surface with "quiet" materials, by reducing grades, (vehicles make more noise going up or down grades) and by reducing the number of

stopping points (vehicles make more noise accelerating and decelerating than when traveling at a steady speed).

Routing of traffic can significantly alter the noise environment in the City. If the traffic is routed so that the number of roads carrying large volumes of traffic is reduced, the extent of the noise impacted area will be reduced. This re-routing of the traffic to a few roads instead of many may increase the noise levels along those few roads necessitating additional noise mitigation measures along those roads, but it would free other areas from noise impaction.

Of course, other factors of safety, the circulation of goods and people, and cost must be considered when evaluating any specific instance. This is in keeping with General Objective Number 2.

Routing of truck traffic can also significantly affect the noise levels in the community. Trucks generally produce much more noise per vehicle than cars. Additionally, the noise is emitted from stacks which are high off the level of the roadway so the noise travels further. The existing layout of truck routes in the City should be carefully reviewed to ensure the trucks are normally allowed only in industrial and heavy commercial areas. The enforcement of the truck routes should be rigorous.

The final item in reducing noise by treating roadways as a noise source, deals with reducing the speed of traffic on roadways throughout the City. This will help reduce the levels since, generally, the noise from motor vehicle traffic increases in direct relationship to the speed of traffic. By reducing the speed of traffic flow, there will generally be a reduction of the sound levels emanating from those roadways.

Non-Vehicle Noise Sources The final set of sources of noise are the entire range of small individual noise events, barking dogs, lawn mowers, noisy air conditioners, noisy neighbors, industrial-type blowers, machine noises, etc., which contribute to the local noise level but which have very little affect on the overall noise environment of the City. These noise sources are or can be under the direct control of the City. One of the major existing controls the City now has over these sources is the design review process. A significant reduction in the impact of the fixed noise sources can be accomplished by careful attention to the design, the location and screening of the equipment. To control the rest of the non-vehicle noise sources, the City can adopt an ordinance to limit the acceptable levels of noise for all of these separate noise sources. It is suggested that the adoption of such an ordinance be delayed until work currently being done by the Federal Government in setting limits of acceptable noise emission from specific noise generators is completed.

As part of the control over non-vehicle noise sources, the City should amend the existing Performance Standards Section of the Zoning Ordinance relating to acceptable sound levels (Sec. 36.36.6(a)) to reflect the goals, objectives and environmental sound level guidelines included herein.

Control Over The Noise Path

The second major factor in noise control, is control over the path the noise takes from the source to the receiver. The path can be interrupted by erecting barriers of various kinds at the roadway edge itself, or by soundproofing buildings to protect the interior noise environment.

Noise Barriers The use of noise barriers or buffers adjacent to roadways is the best method of reducing the environmental noise levels, next to reducing the amount of noise produced by the sources themselves. The use of barriers provides a general decrease in the noise environment, both interior and exterior. The interior noise levels are reduced since there is less noise outside to be transmitted to the inside. These barriers can take many forms but they generally fall into two categories: 1) massive, solid barriers like concrete walls or earth berms, and 2) distance barriers like landscaped areas. Solid barriers will provide noise reductions within the "shadow" of the wall of around 10dB (A). (See Background Report No. 2). Earth berms provide additional protection as they are wider than a wall and thus, provide a distance decrease in the noise. In addition, they provide the opportunity for landscaping which provides a psychological reduction in the noise. Both types of barriers need to be at least six feet high for effective noise control. Distance barriers provide noise reduction in relation to the length of separation between the source and the receiver, generally halving the sound level for each doubling of distance. Distance barriers can also provide the opportunity for landscaping which further decreases the perceived sound level. Unfortunately, the use of barriers for noise control has two major drawbacks; cost and aesthetic appearance. Barriers, whether in the form of a wall or an earth berm or open space are fairly expensive. Aesthetically, the vision of a street lined on both sides with walls may leave much to be desired. The use of barriers to achieve noise control must be evaluated against aesthetic impacts of these barriers. The City should use the Environmental Impact Review process and/or the "sd" zoning review process to examine the feasibility of the use of buffers in any form to reduce the noise levels whenever the existing noise levels in an area exceed the standards for the land use under consideration. Both the question of noise reduction and the cost and aesthetic considerations can be considered through these processes.

Soundproofing Buildings The second major method of blocking the path of noise to reduce the environmental noise level is to soundproof buildings. This technique provides quieter interior noise environments as well as allowing the use of buildings themselves as buffers. The amount of reduction in sound levels varies from 15 to 20 dB(A) for standard construction with partially opened windows, up to 50dB(A) for a concrete building with permanently closed windows. The cost of soundproofing generally increases with the amount of acoustical protection desired. This means, for example, that allowing construction of residential buildings in excessively noisy areas will increase the cost of that housing, assuming the sound standards are required to be met. Soundproofing buildings can also effectively reduce the amount of noise transmitted within a building, especially from apartment to apartment within an apartment building. Particularly important is the noise separation of noisy areas of one unit, like the kitchen and bathroom areas, from the quiet areas of another apartment, like bedroom areas. Soundproofing should be considered for all multi-family units to implement the standards for interior noise in residential areas.

Again, the EIR process or the "sd" zoning review process should be used to determine if noise insulation is required on a given project, and if it is, to what degree. These reviews should occur whenever the proposed project is located in an area where the existing noise levels (at the time the project is proposed) exceed the sound standards for that land use.

Protecting The Receiver

The final method of affecting the noise environment is by modifying the receiver of the noise. This can be done in two major ways; 1) locate land uses in relationship to their sensitivity to noise, and 2) educate the public about the ways they can help to reduce the noise.

Land Use Location One of the major tools available to cities is the ability to direct the location of land use through the General Plan and its implementation. The City should carefully examine all areas severely impacted by noise (beginning at 65dB(A) L₁₀ contour line which represents noise environment twice as loud as the maximum sound standard in residential areas) to insure that proper consideration to the noise environment has been given. In some instances, modifying the indicated land use may be appropriate. In other cases, the designated land use is most appropriate but special attention must be paid to the noise environment through application of the "sd" zone.

Education About Noise The final implementation device available to the City to help reduce the noise levels is to educate the public about what produces noise, its effects on people, and what alternatives are available. Much of the noise annoyances in the City are caused by improper or unthinking use of equipment that does not necessarily have to be loud to be used; for example, playing stereos too loud, racing the car engine, or using a power lawn mower in the early morning. If the equipment was used with care and thought, many of these noise problems could be eliminated or at least reduced. The City, therefore, should undertake a public education program, utilizing pamphlets, brochures and other available media, to educate the public about the noise environment in the City and about ways they can help reduce the noise levels to sound levels.

AMENDMENT NO. 16, ADDITION OF THE SAFETY ELEMENT

Part II Chapter H

SAFETY

This Element is in the furtherance of the General Plan Goals as to "Environmental Quality" and Public Facilities and Resources," and is intended to guide community development so as to avoid or mitigate threats to the safety of people and so as to respect the natural environment. It establishes the community's policies for appropriate public safety levels. As with all other elements of this Plan, these guidelines and policies must be balanced with the other needs of the community.

The objective of this Element is to recognize safety considerations in the planning process in order to minimize loss of life, injuries, damage to property, and economic and social losses within the community. This Safety Element includes and combines the closely related and State-mandated Seismic Safety and Safety Elements into one Element. Ultimately, this Element will contain a section on other safety aspects such as fire protection, flooding, police safety, etc.

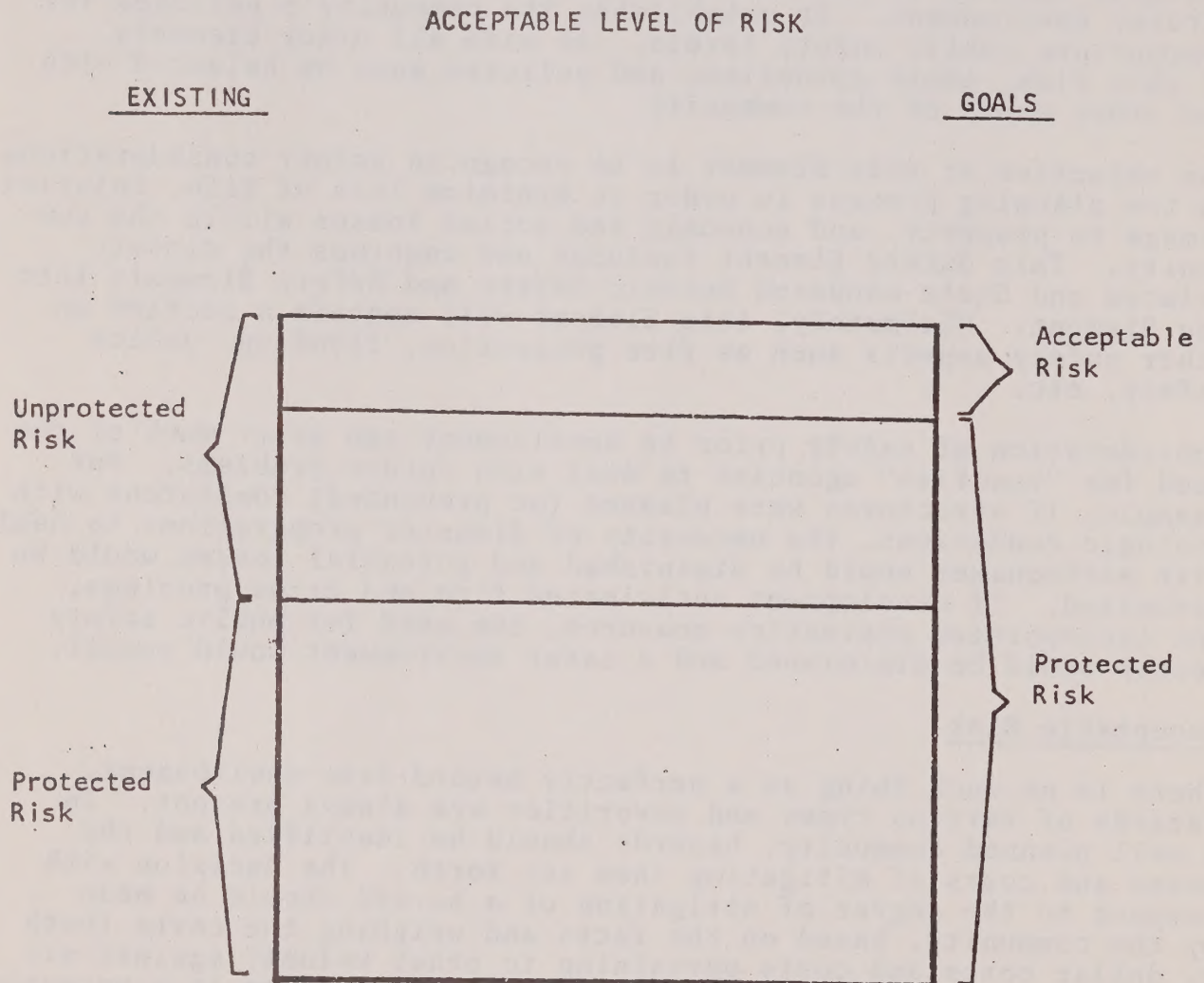
Consideration of safety prior to development can avert much of the need for "reactive" agencies to deal with future problems. For example, if structures were planned (or prevented) consistent with geologic conditions, the necessity of disaster preparations to deal with earthquakes would be diminished and potential losses would be minimized. If development anticipated fire and crime problems, and incorporated preventive measures, the need for public safety forces would be diminished and a safer environment would result.

Acceptable Risk

There is no such thing as a perfectly hazard-free environment. Hazards of various types and severities are always present. In a well planned community, hazards should be identified and the means and costs of mitigating them set forth. The decision with respect to the degree of mitigation of a hazard should be made by the community, based on the facts and weighing the costs (both by dollar costs and costs pertaining to other values) against all other community needs and desires. For example, fire is a potential hazard for every home. That hazard could be almost totally eliminated by such things as use of totally fire-resistive construction, control of combustible contents, smoke detection systems, full sprinkler systems, and facilities and manpower to perform immediate fire fighting. But such mitigation is not selected because there would be a substantial reduction of resources left for the satisfaction of other public and private needs and desires. Consequently,

the community limits the resources applied to reducing fire hazards so as to have resources available for housing, crime prevention, food, recreation, etc. The community specifies a level of risk which will be protected against and the risk remaining is defined as "acceptable risk." The same concept is applicable to all safety hazards.

The following chart serves to illustrate the concept of risks, and the attempt to consciously change the extent to which risks are accepted.



In the chart, the issue is represented by attempting to determine where the line between acceptable risk and protected risk is located. Once hazards are fully recognized, the level of risk which is determined to be acceptable is implicit in the amount of resources allocated to mitigating recognized hazards.

The primary goal for the Safety Element is providing guidelines for allocating resources sufficient to reduce risk to a level which is acceptable to the community. Toward that goal, the following objectives are recognized:

1. Reduction in the loss of life is the highest safety priority, followed by the reduction of property damage and societal disruption.
2. Risks taken unwillingly should be lower than those taken willingly. (i.e., buildings which must be utilized by the public have first priority in reducing safety hazards.)
3. Recognizing that minimizing risks often results in higher costs, those actions which have the greatest effect for the least cost, should have priority. (For example, popular familiarity with disaster plans could be inexpensive and could have a great immediate effect.)
4. Policies should be adopted utilizing various means to reduce losses, such as land use changes, changes in occupancy, building regulations, public information dissemination, insurance rates, etc.
5. The City's Disaster Plan is intended to promptly alleviate hardships resulting from seismic disaster and shall become effective following such disaster.

SECTION I: SEISMIC SAFETY

Introduction

This portion of the Safety Element identifies and appraises seismic hazards, and the policies for reducing seismic risks. The Background Reports for this Element show that ground shaking and ground failure will be the primary problems in Mountain View resulting from fault ruptures on the San Andreas (6 miles west) or Hayward (10 miles east) fault systems, while ground displacement, tsunamis, seiches, or dam failures are not potential problems in this City.

The vast majority of deaths during earthquakes are the result of structural failure due to ground shaking. Most such deaths are preventable, even with present knowledge. New construction can and should be designed and built to withstand probable shaking without collapsing. The greatest existing hazard is the continued use of older structures incapable of withstanding earthquake forces.

A second effect of earthquakes, ground failure, can be compensated for by either avoiding the hazardous site or utilizing stabilization techniques based upon specific geologic and soil investigations.

Historically a major portion of property damage and loss of life resulting after an earthquake can be attributed to fires which result. The problems related to fire control are loss of water systems, blockage of access and the multiple numbers of fires which together may exceed fire fighting resources and combine into conflagrations. Fire fighting capability is therefore of special concern in seismic considerations.

This seismic section identifies areas where ground shaking and ground failure problems are particularly severe and then establishes policies related to them. Where hazards exist, they may be reduced by many means including changes in land use, changes in occupancy, and structural alterations. The policies will include setting priorities for the abatement of hazards consistent with the level of risk acceptable to the community.

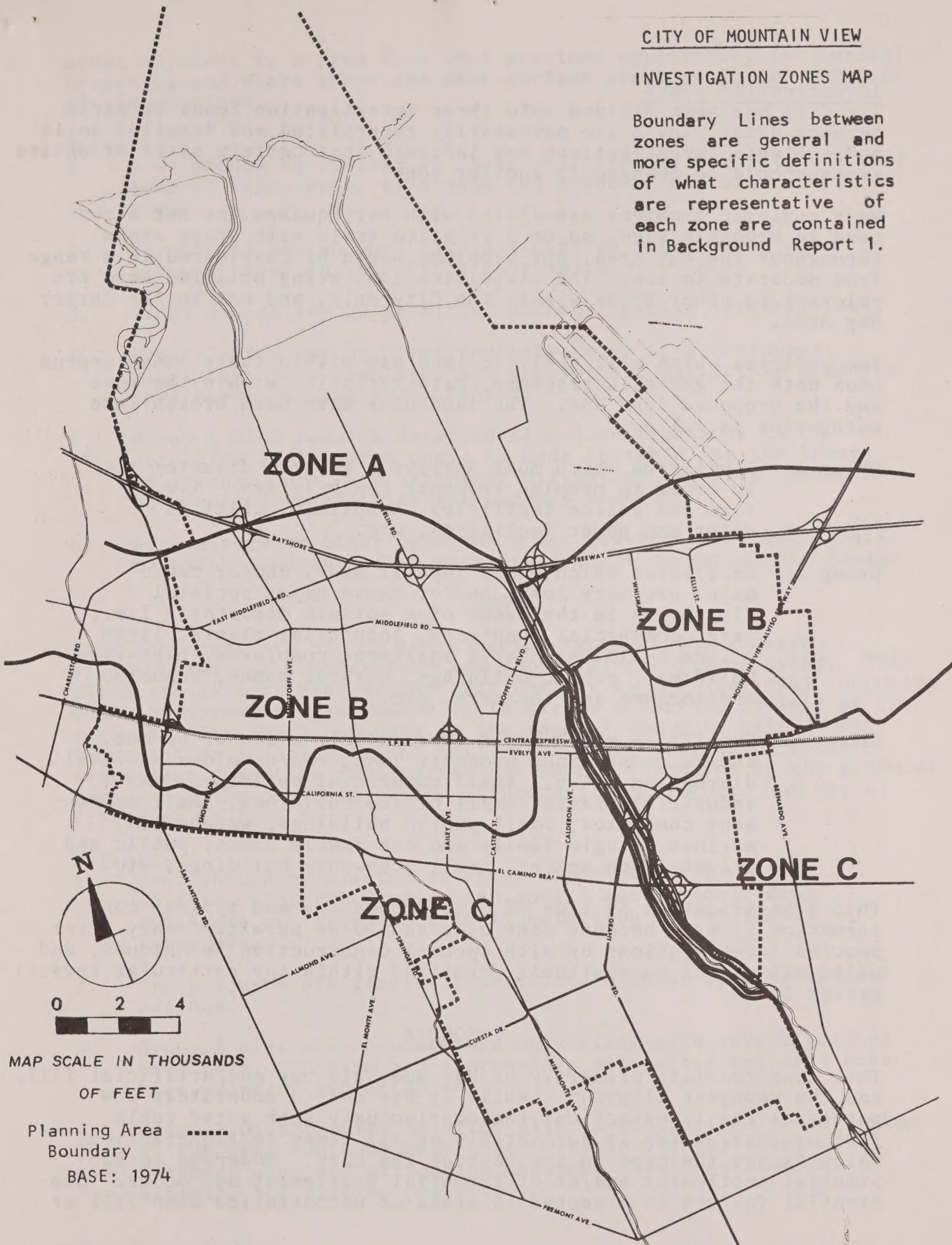
Two Background Reports have been prepared and will be available to provide background material in some degree of detail which is important in seismic considerations. Background Report I interprets earth science data related to Mountain View and three investigation zones have been derived from its conclusion (displayed on the map on Page 5). Particular policies for each zone have also been formulated.

Background Report II ranks areas by relative concern over possible losses and briefly describes structural hazards, critical facilities and fire hazards. A map (Page 9) showing the areas of moderate or high concern is followed by a description of these areas. Finally, general policies related to seismic safety have been established.

CITY OF MOUNTAIN VIEW

INVESTIGATION ZONES MAP

Boundary Lines between zones are general and more specific definitions of what characteristics are representative of each zone are contained in Background Report 1.



MAP SCALE IN THOUSANDS
OF FEET

Planning Area Boundary

BASE: 1974

Investigation Zones

The City has been divided into three Investigation Zones of earth science data. These are necessarily generalized and detailed soils and geologic investigations may indicate that certain sites or entire areas should be changed to another zone.

Many geologic problems associated with earthquakes are not a concern in Mountain View, so on a relative scale with other areas throughout the Bay Area, our problems would be considered in a range from moderate to low. The classifications being utilized here are relevant to other areas within the City only, and not to the larger Bay Area.

The policies which will apply to land use within these zones depend upon both the geologic response characteristics within the zone and the proposed land use. The land uses have been broken into categories as follows:

- Group 1. Facilities which must survive a seismic disaster in order to provide response capabilities - i.e., fire and police facilities, hospitals, critical water and power facilities, etc.
- Group 2. Facilities which would imperil many, and/or cause major property loss, and/or cause major societal disruption in the event of a seismic disaster - i.e., large commercial complexes, industrial plants, large office buildings, large apartment complexes, high-rise buildings, public buildings, nursing homes, schools, auditoriums and theaters, etc.
- Group 3. Facilities which would imperil only a few or no one, and/or cause minor property loss, and/or minor societal disruption - i.e., small commercial buildings, small industrial plants, small office buildings, small apartment complexes, small public buildings, warehouses, marinas, single-family and two-family homes, public and private open spaces, small accessory buildings, etc.

This classification by type of use, occupancy, and typical construction is made because some uses should be permitted only after special investigations or with special construction techniques, and still others may be routinely permitted within any particular Investigation Zone.

ZONE A

This zone consists primarily of bay mud, old bay mud, artificial fill, and the youngest alluvium. While it has only a moderately low potential for liquefaction, the continuously high water table (10' or less) makes it susceptible at all times to liquefaction, which is not the case in the rest of the City. Moderate to substantial settlement and/or differential settlement may occur. Substantial failure is expected in areas of uncontrolled dump fill or

areas adjacent to a free face that provides opportunity for lateral spreading and where there are near-surface granular layers capable of liquefaction.

Policies

1. Uses should be limited to those representing low potential for loss of life, property damage and economic and social dislocations.
2. Structural design must take anticipated settlements into account based on investigation results.
3. Group 3 uses may be permitted without special investigation.
4. Group 2 uses may be permitted only after site investigations have been completed and appropriate mitigating measures have been proposed and accepted.
5. Group 1 uses require detailed site investigations to determine if the area could be made suitable for the level of intended use, and stringent mitigating measures should be required to minimize the hazards present.
6. Agriculture or other open space and low-intensity uses shall be encouraged for sites most susceptible to earthquake damage.

ZONE B

This zone consists of the two youngest types of the younger alluvium and has a moderately low potential for liquefaction. This potential is decreased by the fact that it is only seasonal, occurring when the normally lower water table swells to within 10 feet of the surface. Its inner boundary is the edge of the Qyfo soil. Deep liquefaction and significant settlement (including differential settlement resulting from variations in the thickness of the granular layers and the position of the structure) is possible, but not as likely as in Zone A.

Policies

1. Uses should be limited to those where the risk of loss of life, property damage, and social and economic dislocations are acceptable if liquefaction or settlement takes place.
2. Group 3 uses are generally permitted without special investigations.
3. Group 2 uses may be permitted only after site investigations have been completed and appropriate mitigating measures have been proposed and accepted.
4. Group 1 uses require detailed site investigations to determine if the area could be made more suitable for the level of intended use, and mitigating measures should be required to minimize the hazards present.

ZONE C

This zone contains older alluvium and the oldest type of younger alluvium and has a moderately low potential for liquefaction. Neither significant settlement nor ground failure is likely to be experienced. This zone is the area where the anticipated behavior of the soil and its effect on improvements is considered to be the best in the City.

Policies

1. Uses are not generally limited because of the soil conditions.
2. Group 2 and 3 uses are generally to be permitted.
3. Group 1 uses may be permitted only after site investigations have been completed and appropriate mitigating measures have been proposed and accepted.

Areas of Concern

The Investigation Zones can particularly aid in determining future land use policies, but they are also useful for a review of current policies. To aid in this endeavor, the existing General Plan Map was overlaid with the Investigation Zone Map. The technique used to discern areas of moderate or higher concern is detailed in Background Report II. In this manner, it was possible to determine where relatively moderate or higher losses are most probable with respect to the rest of the City. These areas are shown on the map on the following page. Where there is moderate or higher concern (relative only to Mountain View) for any type of loss - loss of life, property damage, or economic and social dislocation - at any time of day - 2:30 a.m., 2:00 p.m., or 4:30 p.m. - it is identified on this composite map.

Since this map of presently existing relative concerns is based on existing land use policies compared to their geologic setting, the concern over possible losses could be reduced in many ways. Concern can be reduced by altering the type of land use, the type of occupancy, the type of structure, special soil treatment, etc.

A brief summary, by Planning Area, of the primary factors which led to the conclusion that there were potentially moderate or higher concerns present will serve to highlight possible mitigating measures. More detailed information on geology and structural characteristics and the determination of these relative rankings is embodied in the Background Reports.

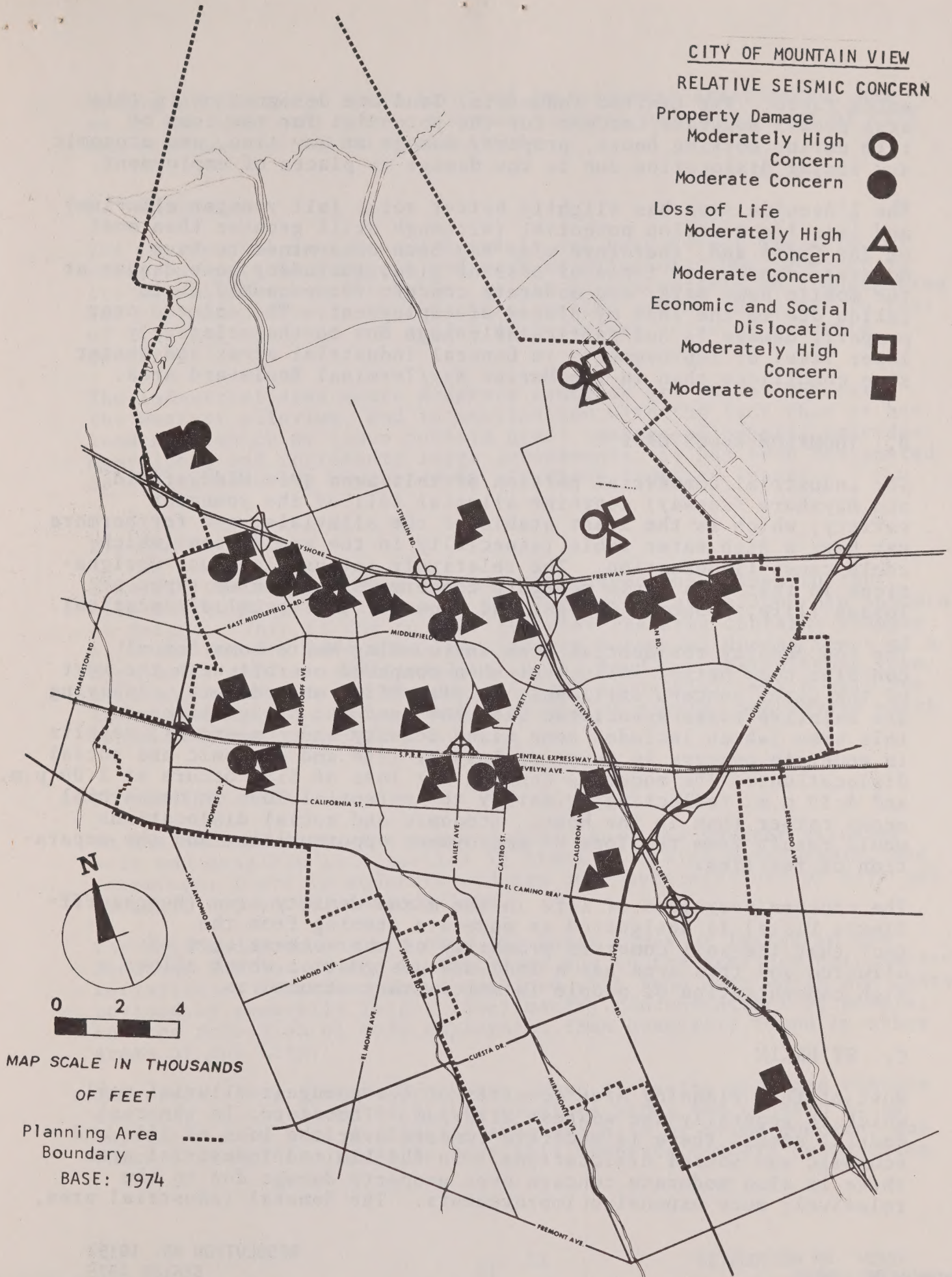
A. NORTH BAYSHORE

The Marine Way/Terminal Boulevard Area has moderate risks resulting from the fact that this contains artificial fills, bay mud and younger alluvium soils; and is subject to greater liquefaction potential than most of the City due to the thick alluvium and high

CITY OF MOUNTAIN VIEW

RELATIVE SEISMIC CONCERN

- | | |
|---------------------------------|---|
| Property Damage | |
| Moderately High Concern | ○ |
| Moderate Concern | ● |
| Loss of Life | |
| Moderately High Concern | △ |
| Moderate Concern | ▲ |
| Economic and Social Dislocation | |
| Moderately High Concern | □ |
| Moderate Concern | ■ |



MAP SCALE IN THOUSANDS
OF FEET

Planning Area Boundary

BASE: 1974

water table. The Limited Industrial land use designation in this area evokes moderate concern for the potential for the loss of life during working hours, property damage at any time, and economic and social dislocation due to the damage to places of employment.

The L'Avenida Area has slightly better soils (all younger alluvium) and less liquefaction potential (although still greater than most of the City) and, therefore also has been determined to have moderate concern in terms of loss of life, including some danger at the mobile home park, and moderate concern for economic dislocation due to the loss of places of employment. The concern over property damage is not particularly high due to the relatively lower level of improvements in General Industrial areas and better site conditions than in the Marine Way/Terminal Boulevard Area.

B. THOMPSON-RENGSTORFF

The industrial/commercial portion of this area (Old Middlefield and Bayshore Freeway) contains alluvial soil of the youngest variety, which is the least stable of the alluvials, and furthermore may have a high water table (especially in the wet season) which could cause liquefaction. The relatively intense land use designations in this area cause moderate concern for all three types of losses (life, property damage, and economic and social dislocation).

The low density residential area surrounding Monte Loma School contains some better soils, but when compared overall with the rest of the City, concern still must be classified as moderate. Applying the relative risks associated with the land use designations in this area (which includes some mixed-density and commercial) results in moderate concern in terms of loss of life and economic and social dislocations. The moderate concern for loss of life occurs at 2:00 p.m. and 4:30 p.m. reflecting primarily the potential loss in commercial areas rather than in the home. Economic and social dislocations would result from the loss of employment opportunities and the separation of families.

The concern over loss of life in the mixed-density area (Rengstorff-Sierra Vista) is designated as moderate stemming from the fact that the soil consists primarily of the weakest type of alluvium and this area has a land use designation which allows a high concentration of people in multi-story structures.

C. STIERLIN

Most of this Planning Area consists of the youngest alluvial soil, which is generally the weakest alluvium. Therefore, in the residential areas, there is moderate concern over the loss of life and economic and social dislocations. In the Limited Industrial area there is also moderate concern over property damage due to the relatively more expensive improvements. The General Industrial area,

having a relatively lower level of improvements anticipated, has - as in the apartment area - moderate concern only over loss of life and economic and social dislocation.

D. WHISMAN

The residential area around Evandale and Easy Street has alluvial soil, but not the youngest and weakest alluvium. Due, however to its normally high water table, it may be susceptible to liquefaction and the mixed-density land use designation causes the risks to loss of life and economic and social dislocations to be of moderate concern.

The industrial area where moderate concerns are shown contains the weakest alluvium, and in combination with the fact that it has land uses which at times contain great numbers of people, provides many jobs, and represents large investments, it has been designated as having moderate concern over all three types of losses.

E. SAN ANTONIO

Moderate concern is shown for all three types of losses in the area surrounding California to the Expressway and around San Antonio to Ortega. This is due to the fact that the area contains younger alluvium and may have some liquefaction potential during times of a high water table. Additionally, it has land use designations (commercial, mixed-density residential, and industrial) which call for large investments, large concentrations of people, and losses which would affect many people.

F. CENTRAL AREA

In the Central Area, the mixed-density area has younger alluvial soil and possible liquefaction in times of a high water table, and therefore, there is moderate concern over possible loss of life and economic and social dislocations.

There is moderate concern over all three types of losses in the Downtown portion of the Central Area due to the same geologic characteristics as described above combined with land uses which are characterized by generally larger investments, concentrations of people, and the provision of more employment than generally found in other areas of the City.

The areas along Stevens Creek are shown as having moderate concern due only to the slope stability problems along the creek. It is therefore only that particular area which is of prime concern, and which caused those areas to have this moderate concern designation.

G. GRANT

Only one portion of this Planning Area has moderate risks or moderate concern designated for loss of life and economic and social dislocations, again due to the slope stability problems in this area along Stevens Creek where there is residential land use designated.

General Policies For Seismic Safety

1. Areas identified as having relatively moderate or higher concern with regard to possible losses shall have priority in resources allocated to the mitigation of safety hazards.
2. The City will use and encourage various mitigating measures for seismic hazards, some of which would be directed towards existing hazards (such as currently hazardous structures) and others directed to potential future hazards (such as future construction).
3. The City should seek to identify seismic hazards in an ongoing process.
4. As risks and the means for mitigating those risks become defined, the community will re-examine both risks and the resources allocated to mitigating them.
5. The City should adopt standards for new buildings in order to strive for a relatively low seismic risk potential even though this may involve higher immediate costs.
6. Special soil investigations and structural designs should be utilized in Investigation Zones most susceptible to geologic problems and areas where high or moderate concern has been identified.
7. Specific site investigations designed to define the existence of seismic and other safety hazards should be required to be completed and an evaluation of the suitability of specific sites made, before decisions are made on the location of critical facilities (public buildings such as Fire, Police, hospitals, etc.).
8. Existing critical facilities which may be susceptible to seismic or other safety hazards as determined through investigation programs should be protected by a set of special hazard-mitigating measures to reduce risks. Consideration should be given to phasing out such facilities.
9. Lifelines (communications, water, transportation routes, train facilities, sewers, and other facilities necessary to sustain urban life) should be routed so as to avoid hazardous areas in the community; where routing through hazardous areas is unavoidable, special measures shall be taken to insure a minimum of damage under seismic conditions.

10. Large scale disaster planning is a necessity. Local emergency organizations should be integrated into an overall structure.

General Programs For Seismic Safety

1. A program of public information on the existence of seismic hazards should be undertaken.
2. A program to inventory existing buildings in areas of high or moderate concern where collapse due to ground shaking (especially susceptible older structural types which were not designed to withstand earthquake forces) may be a particular problem. A program for phasing out such buildings should be developed.
3. A program to inventory projecting signs, parapets and other architectural elements for dangers in seismic episodes should be prepared and appropriate ordinances requiring removal or other mitigation of the dangers identified should be established.
4. A survey of structures should be made to determine which ones may be particularly susceptible to damage and/or collapse. The priority for such a survey will begin with critical facilities, then move to structures in areas of moderate and higher concern, and finally to structures in low concern areas.
5. Emergency water supplies should be established to be used for fire fighting and for cooking and drinking following an earthquake disaster.
6. City Construction Permit requirements should be modified as may be warranted in the case of particularly hazardous site conditions.
7. Seismic conditions should be continuously taken into account in reviewing development proposals, precise plans, zoning actions, etc.
8. Continual updating and modification of the City's Disaster Plan should occur to deal with seismic problems.
9. A program designed to assess new information on safety hazards should be undertaken, as such information becomes available, in order to continually update the investigation zone delineations.
10. A program should be undertaken to determine the precise nature and extent of the site investigations to be required in each of the investigation zones for different land use groupings which incorporate the contributions of a geologist, a soils engineer, a structural engineer, etc.

SECTION 2: Fire Safety

Introduction

This portion of the Safety Element is to identify and appraise the level of protection which should be provided with regard to fires in Mountain View. Portions of Amendment No. 8, General Plan Text Revision, "Fire Protection," Chapter 6, Section 4 of the General Plan are herein included by reference including Pages 1 through the first paragraph on Page 4 and Pages 6 (implementation programs) through the end of this Amendment.

Other Fire and Emergency Considerations

Some other considerations which may be of special importance for policy guidance are:

Evacuation Routes. Due to the fact that Mountain View is completely surrounded by developed accessible areas and linked to those areas by a complete network of surface streets, there should be no problem in evacuating any area. Since the Preliminary Inundation Maps showing areas of potential flooding in Mountain View and further, since no data shows that this City is more susceptible to earthquake or fire dangers than surrounding communities, the need for any mass evacuation is unlikely. Should such ever be required, the Emergency Operations Center would be responsible for selecting and directing people to the appropriate route.

Peak Load Water Supply Requirements. It is city policy that water main sizes and supply sources meet recognized standards of the fire insurance underwriters and the American Water Works Association. It is further city policy that the Fire Code insure that adequate hydrant flow rates exist at any given site.

Minimum Road Widths. The low-intensity nature of development in Mountain View and the fact that it has taken place primarily after the private auto had become the dominant means of travel, has encouraged streets sufficiently wide to meet emergency service requirements yet be designed consistent with other goals of the General Plan.

Clearances Around Structures. There are no wild land areas within Mountain View which present a fire hazard to development and it is city policy to maintain an actively enforced Weed Abatement Program. It is further city policy to insure that zoning and building codes provide sufficient clearances around structures for safety from fires.

GENERAL PLAN MAP

This General Plan Map identifies the geographic areas of the community for open space/recreation, residential, commercial, and industrial uses. Precise Plans (or derivative plans) are the principal means and next step for designating intensities of use, mixture and means of transition.



U.C. BERKELEY LIBRARIES



C123319552

INSTITUTE OF GOVERNMENTAL STUDIES LIBRARY
109 PHILOSOPHY HALL
UNIVERSITY OF CALIFORNIA
BERKELEY, CA 94720